BHARATI VIDYAPEETH'S
COLLEGE OF ENGINEERING FOR WOMEN, PUNE
Pune-Satara Road, Dhankawadi, Taluka – Haveli, Dist.- Pune
Reaccredited by NAAC with "A" Grade, Affiliated to Savitribai Phule Pune University (SPPU)
Approved by DTE. Govt. Of Maharashtra and AICTE, New Delhi
DTE Institute Code-EN6285, Pun Code-PU/PN/Engg. /150/2000

E-mail: -coewpune@bharatividyapeeth.edu   Website: - http://coewpune.bharatividyapeeth.edu

Students are encouraged to participate in nationally recognized project competitions such as the Smart India Hackathon and Avishkar etc. The institute provides systematic mentoring, technical guidance, and infrastructural support to help students identify real-world problems, develop innovative solutions, and implement interdisciplinary project ideas. Faculty members guide students through problem definition, design thinking, prototype development, and project presentation.

Impact

- Enhanced problem-solving, critical thinking, and innovation skills among students
- Improved exposure to national-level competitive platforms and industry-oriented problem statements
- Strengthened teamwork, leadership, and project management capabilities
- Increased motivation towards research, product development, and entrepreneurship

Outcomes

- Development of high-quality, application-oriented projects
- Improved student performance in national competitions
- Greater readiness for industry, higher studies, and research careers
  - Promotion of an innovation-driven and outcome-based learning culture within the institute.

Bharati Vidyapeeth's College of Engineering for Women, Pune-43
Smart India Hackathon 2025

About the internal competition

Bharati Vidyapeeth's College of Engineering for Women, Pune-43, is set to conduct a guidance session to provide guidance for effective presentation preparation on September 20, 2025. In conjunction with this, the college hosted an Idea Presentation: Internal Hackathon for Smart India Hackathon 2025 on September 27, 2025. A total of 35 groups had registered for the internal Hackathon, which was held across two venues.

The internal competition was judged by a panel consisting of four jury members: one external member from Finserve India Pvt. Ltd., Pune, and three internal members from the E&TC, Computer, and IT departments. All participants registered through their respective department project coordinators. The event was conducted in offline mode, with a total of 210 female participants. Out of the 35 participating teams, the jury has identified 22 top teams.

Bharati Vidyapeeth's College of Engineering for Women, Pune-43
Smart India Hackathon 2025

Guidance Session for Internal Evaluation Report

Date: 20th September, 2025

An **orientation and guidance session** was organized to support students in preparing for **Smart India Hackathon (SIH) 2025 – Software and Hardware editions**. The session aimed to provide participants with an overview of the competition, insights into effective idea presentation, and guidance for refining their proposed solutions.

Photo: Prof. M. A. Rane explaining conducting guidance session

Attendance was made **mandatory for at least two members from each team**, ensuring that every group could benefit from the expert advice and information shared. The resource persons highlighted strategies for problem identification, innovative thinking, and best practices in presenting ideas to mentors and evaluators. The session proved highly beneficial in equipping students with the **necessary direction and confidence** to participate successfully in SIH 2025.

Bharati Vidyapeeth's College of Engineering for Women, Pune-43

Smart India Hackathon 2025

Idea Presentation: Internal Hackathon Schedule

Date: 27th September, 2025

Gr. No.	Team Name	Team Leader Name	Mobile No.	Time	Venue
04	Utthān	Parivita Sampagaonkar	9545731750	9.45-9.55AM	Comp C
2		Purva Kharche	9860039926	9.55-10.05AM	Comp C
3	Hexabytes	Saee Patil	8380834612	10.05-10.15AM	Comp C
4	The Invictus	Trupti Jadhav	8080187032	10.15-10.25AM	Comp C
5	Quantum Coders	Sayali Sarwade	7620066849	10.25-10.35AM	Comp C
6	Risers'27	Anamika Sharma	8668428984	10.35-10.45AM	Comp C
7	The Glitch Busters	Eshitta Patil	9209342446	10.45-10.55AM	Comp C
8	EcoEdVenturer	Radha pawar	8390410579	10.55-11.05AM	Comp C
9	GeoSpectra	Nikita Bhosale	7972410355	11.05-11.15AM	Comp C
10	HackHers	Nandini Pandey	8888740037	11.15-11.25AM	Comp C
11	HerVision	Diksha Dhalpe	7020881100	11.25-11.35AM	Comp C
12	Beyond	Preeti Birajdar	88558 55161	11.35-11.45AM	Comp C
13	HackHerWay	Sanika Ghogare	9325547899	11.45-11.55AM	Comp C
14	The She-Novotars	Sanika Basare	9922067332	11.55-12.05PM	Comp C
15	CODE-Crafters	Ayushi Sinha	8767512241	12.05-12.15PM	Comp C
16		SIDDHI	8619198280	12.15-12.25PM	Comp C

		DATTATRAY KSHIRSAGAR			
17	Chic Geeks	Kashmira Waghulkar	9022594881	12.25-12.35PM	Comp C
18	Tech Titans	Gayatri Khade	9730664437	9.45-9.55AM	208
19		Pooja Lokare		9.55-10.05AM	208
20	CodeVengers	Yashashree Amap	7020697978	10.05-10.15AM	208
21	Team Innovatrix	Payal Thorat	8349830909	10.15-10.25AM	208
22	CosmoCoders	Tanvi Sangale	9421555988	10.25-10.35AM	208
23	BugSlayers	Ashlesha mule	8308667445	10.35-10.45AM	208
24	SparkPlugs	Smita Katurde	9309073597	10.45-10.55AM	208
25	Connektra	Sanika Dhole	9322257582	10.55-11.05AM	208
26	LadyBugs	Pragati Lavande	8767334246	11.05-11.15AM	208
27		Chetana shenai		11.15-11.25AM	208
28	Techsutra	Shweta Patil	820 880 0409	11.25-11.35AM	208
29	ResQTech	Riya yamsanwar	9405561339	11.35-11.45AM	208
30		Tanayaa Rajole		11.45-11.55AM	208
31		Purva Upadhyay		11.55-12.05PM	208
32		Tvesa Singh		12.05-12.15PM	208
33	AidSure	Vaidehi Edaki	8261889661	12.15-12.25PM	208
34	CodeBusters	Aditi Gosavi	9518773707	12.25-12.35PM	208
35		Sharanya Yeltiwar		12.35-12.45PM	208

Bharati Vidyapeeth's College of Engineering for Women, Pune-43

Smart India Hackathon 2025

About the Problem Statement

Sr. No.	Problem Statement Code	Problem Statement Title	Total no. of teams attempted Problem Statement	Total no. of Shortlisted teams
1	SIH25014	Waste Segregation Monitoring System for Urban Local Bodies	1	0
2	SIH1660	Interactive gamified approach to Ocean Literacy	1	1
3	SIH25137	Student Innovation: Swadeshi for Atmanirbhar Bharat - Travel & Tourism	2	2
4	SIH25018	Telemedicine Access for Rural Healthcare in Nabha	2	1
5	SIH25030	Al-Based Crop Recommendation for Farmers	1	1
6	SIH25066	Development of an Al-driven ChatBOT for INGRES as a virtuall assistant	1	1
7	SIH25092	Development of a Digital Mental Health and Psychological Support System for Students in Higher Education	1	1
8	SIH25008	Disaster Preparedness and Response Education System for Schools and Colleges	1	1
9	SIH25009	Gamified Environmental Education Platform for Schools and Colleges	1	0
10	SIH25099	AI-powered monitoring of crop health, soil condition, and pest risks using	1	1

		multispectral/hyperspectral imaging and sensor data.		
11	SIH25037	Development of a low-cost camera-based automated beach sand grain size mapping system	1	0
12	SIH25175	MAITRI : An AI Assistant for Psychological & Physical Well-Being of Astronauts	2	2
13	SIH25140	Student Innovation: Swadeshi for Atmanirbhar Bharat - Smart Education	3	1
14	SIH25002	Smart Tourist Safety Monitoring & Incident Response System using Al, Geo-Fencing, and Blockchain-based Digital ID	2	1
15	SIH25025	E tongue for Dravya identification	1	1
16	SIH25061	Digitize and Showcase Monasteries of Sikkim for Tourism and Cultural Preservation	1	0
17	SIH1555	Create a Virtual Herbal Garden that provides an interactive, educational, and immersive experience to users, showcasing the diverse range of medicinal plants used in AYUSH (Ayurveda, Yoga & Naturopathy, Unani, Siddha, and Homeopathy).	2	0
18	SIH1775	Fake social media accounts and their detection	1	1
19	SIH25013	Real-Time Public Transport Tracking for Small Cities	1	1
20	SIH25105	Hybrid Renewable Energy Generation Solution	1	1
21	SIH25228	Cryptocurrency address collection and categorization system	1	1
22	SIH25170	Enhancing OpenAI's GPT-OSS with Multimodal Vision Capabilities extensible to ISRO EO Data	1	1
23	SIH1598	Student Innovation	1	1
24	SIH25094	One-Stop Personalized Career & Education Advisor	1	1
25	SIH25036	Development of Sensor for Detection Of Microplastics	1	1
26	SIH25063	Developing a cost effective solution for detecting the breakage of Low Voltage AC Distribution Over Head conductors	1	1
27	SIH25130	Student Innovation: Swadeshi for Atmanirbhar Bharat - Heritage & Culture	1	1
28	SIH25139	Student Innovation: Swadeshi for Atmanirbhar Bharat - Disaster Management	2	1

Bharati Vidyapeeth's College of Engineering for Women, Pune-43

Smart India Hackathon 2025
Jury Information

Jury Photograph	Information
 Mr. Abhinandan Yadav (External Jury)	Abhinandan Yadav is a passionate and results-driven professional with expertise in product management. He combines strong technical skills with strategic thinking to deliver impactful solutions. Abhinandan is committed to continuous learning, innovation, and leveraging digital technologies to drive growth.
 Prof. Dr. S. A. Dhole (Internal Jury)	Prof. Dr. S. A. Dhole, working as an Assistant Professor, has completed her Ph.D. in Electronics from Bharati Vidyapeeth (deemed to be University), College of Engineering, India in 2017 with specialisation in Image Processing and Biometrics. She has published more than 30 research papers, including 7 scopus indexed. She has filed 2 patents and 1 copyright. She has worked as Reviewer for many International and National conferences.
 Prof. S. B. Jadhav (Internal Jury)	Prof. Sheetal Balasaheb Jadhav working as an Asst. Professor in the Computer department since August, 2006. She completed her M.Tech (Computer) and is currently pursuing Ph.D.

  Prof. Dr. K. A. Malgi (Internal Jury)	Prof. Dr. Ketki Amit Malgi working as an Associate Professor in the Information Technology department. She has completed her Ph.D. in 2020. She has more than 20 years of teaching experience. She published more than 10 papers published in reputed international journals. Her domain is Cloud Computing and AIML. She has worked as Reviewer for many International and National conferences.

Bharati Vidyapeeth's College of Engineering for Women, Pune-43

Smart India Hackathon 2025

Internal Hackathon Photograph

BVCOEW

Time: 09.27.2025 10:12
Altitude: 0.0m
Lat/Long: Lat 0.0 Long 0.0

Photo: External Jury Mr. Abhinandan Yadav, Internal Jury Members Dr. S. A. Dhole, Dr. K. A. Malgi, Mrs. S. A. Karande, SPOC Ms. M. A. Rane appreciating and motivating participating teams

Photo: Vice Principal (Academics) Prof. Dr. S. S. Chorage, and Vice Principal (Admin) Prof. Dr. A. M. Pawar with Jury members and Guests

Photo: Team Utthan explaining their idea

Team Geospectra presenting their idea to Juries

BHARATI VIDYAPEETH'S
COLLEGE OF ENGINEERING FOR WOMEN, PUNE
Smart India Hackathon 2025
Internal Hackathon: IDEA PRESENTATION
Evaluation Form

Date: 27th September, 2025

Group No.:

Group Name:

Problem Statement:

	Assessment1	Assessment2	Assessment3	Assessment4
Novelty of Idea				
Complexity				
Solution Approach/ Methodology				
Communication Skill				
Technical Feasibility				
Practicability				
Sustainability				
Scale of Impact				
User Experience				
Potential for Work				
Total Marks				

* Marks should be given on the Scale 1 to 5 (1:Low and 5:High)
Overall Remark: Shortlisted/Not Shortlisted

Prof.Dr.S.A.Dhole   **Prof. Dr.K.A.Malgi**   **Prof.S.A.Karande**   **Mr. Abhinandan Yadav**
   Internal Jury1   **Internal Jury2**   **Internal Jur**   **External Jury**

Bharati Vidyapeeth's College of Engineering for Women, Pune-43

Smart India Hackathon 2025

Participation Statistics

Total no . of Registration	35
Total no. of Participants	210
Total no. of Female participant	210

Bharati Vidyapeeth's College of Engineering for Women, Pune-43

Smart India Hackathon 2025

Nominated Top Teams

Team. No.	Team Name	Problem Statement ID	Team Leader Name	Mobile No.	Class
3	CODE-Crafters	SIH1660	Ayushi Sinha	8767512241	TE(IT)
4	Utthān	SIH25137	Parivita Sampahaonkar	9545731750	BE(Comp)
5	The_Invictus	SIH25018	Trupti Jadhav	8080187032	TE(E&TC)
6	Quantum_Coders	SIH25030	Sayali Sarwade	7620066849	TE(E&TC)
7	Innovatrix	SIH25066	Payal Thorat	8349830909	SE(IT)
8	Risers'27	SIH25092	Anamika Sharma	8668428984	TE(Comp)
9	The_Glitch_Busters	SIH25008	Eshitta Patil	9209342446	TE(E&TC)
11	GeoSpectra	SIH25099	Nikita Bhosale	7972410355	TE(Comp)
13	HackHers111	SIH25175 SIH25228	Nandini Pandey	8888740037	TE(IT)
14	CosmoCoders	SIH25170	Tanvi Sangale	9421555988	SE(E&TC)
15	HerVisionX	SIH1598	Diksha Dhalpe	7020881100	TE(IT)
16	BugSlayers	SIH25094	Ashlesha mule	8308667445	SE(IT)
17	SparkPlugs	SIH25036	Smita Katurde	9309073597	SE(E&TC)

18	Connektra	SIH25063	Sanika Dhole	9322257582	SE(E&TC)
19	LadyBugs	SIH25130	Pragati Lavande	8767334246	SE(E&TC)
20	ResQtech	SIH25139	Kavyanjali Chaudhary	9023426169	SE(Comp)
23	Techsutra	SIH25175	Shweta Patil	8208800409	SE(IT)
25	BeyondInfinity	SIH25140 SIH25137	Preeti Birajdar	88558 55161	TE(E&TC)
27	HexabytesCoders	SIH25025	Saee Patil	8380834612	BE(E&TC)
33	Chic_Geeks	SIH1775	Kashmira Waghulkar	9022594881	FE(Comp)
34	HackHerWay	SIH25013	Sanika Ghogare	9325547899	TE(Comp)
35	The _She_Novotars	SIH25105	Sanika Basare	9922067332	TE(IT)

Participation Statistics

Total no. of Registered teams	35
Total no. of Participants	210
Total no. of Female participant	210
Total no. of Nominated Teams	22

Bharati Vidyapeeth's College of Engineering for Women, Pune-43

Smart India Hackathon 2024

About the internal competition

Bharati Vidyapeeth's College of Engineering for Women, Pune-43, is set to conduct an preliminary internal evaluation to provide personalized guidance for effective presentation preparation on September 6, 2024. In conjunction with this, the college hosted an Idea Presentation: Internal Hackathon for Smart India Hackathon 2024 on September 13, 2024. A total of 40 groups had registered for the internal Hackathon, which was held across two venues.

The internal competition was judged by a panel consisting of four jury members: one external member from Nihilent, Pune, and three internal members from the E&TC, Computer, and IT departments. All participants registered through their respective department project coordinators. The event was conducted in offline mode, with a total of 240 female participants. Out of the 40 participating teams, the jury has identified 31 top teams for nomination and idea submission.

Bharati Vidyapeeth's College of Engineering for Women, Pune-43

Smart India Hackathon 2024

Preliminary Internal Evaluation Schedule

Date: 6th September, 2024

Team. No.	Team Name	Team Leader Name	Mobile No.	Time	Venue
1	TechHex6	Apurva Nangare	8380944572	9:15-9:20	101
2	AUTOMINDS	Riddhi Baldwa	8956310789	9:20-9:25	101
3	Digital Gram Sanrakshak	Prachi Kad	7385518639	9:25-9:30	101
4	VOCATIONAL _VANGUARD S	Gayatri Temgire	9579717037	9:30-9:35	101
5	SevaPulse	Manasi Khaire	9922933344	9:35-9:40	101
6	SANCHARA	Malishka Salke	8407976394	9:40-9:45	101
7	RoutetoRoots	Siddhi Algude	8554962123	9:45-9:50	101
8	YUKTI	Sunita Pawar	77700 97718	9:50-9:55	101
9	AYUSH_Archi ver	Parivita Sampagaonka	9545731750	9:55-10:00	101

		r			
10	Hackteam_66	Sakshi Pandey	9626566391	10:00-10:05	101
11	Code_Commandos	Riddhi Taharabadkar	9552741043	10:05-10:10	101
12	Fake_Busters	Pratiksha Kadam	8010406098	10:10-10:15	101
13	AVINYA	Janhavi Sharma	7083327668	10:15-10:20	101
14	Tech_Genesis	Farin Attar	8432412005	10:20-10:25	101
15	Ignis_Core	Sharayu Tekade	9658766962	10:25-10:30	101
16	InnoSphere X	Ayesha Shaikh	7499817376	10:30-10:35	101
17	TechTalk	Chetana Patil	9325575205	10:35-10:40	101
18	INSIGHT_INNOVATORS	Sakshi Jadhav	9322304361	10:40-10:45	101
19	GLITCH_SQUAD	Rutakshi Sakhare	9175013511	10:45-10:50	101
20	AGRIYOS	Vedika Shinde	9359628714	10:50-10:55	101
21	The_Civic_Guides	Tanvi Gaonkhadkar	9356742368	10:55-11:00	101
22	Fake_detector	Shivknya Arote	9322918813	11:15-11:20	101
23	R3d_Seika	Samruddhi Badgujar	8275110690	11:20-11:25	101
24	CodeX11	Prerana Bhokare	8767821245	11:25-11:30	101
25	TECH_TITANS	Shreya Choudhury	9801965787	11:30-11:35	101
26	Trash2Tech	Tanaya More	9529010774	11:35-11:40	101
27	Techno_femmes	Dhanshree Memane	7350469455	11:40-11:45	101
28	Risers27	Ameya Anil Nimkar	9730347525	11:45-11:50	101
29	AEKYAMS	Shriya Bhan	6005652005	11:50-11:55	101

30	FertiBoost	Shravani Mardane	7020239728	11:55-12:00	101
31	Computer_Insiders	Ishika Thakur	8999109859	12:00-12:05	101
32	HavocHelpers	Vaishnavi Shinde Patil	9371639450	12:05-12:10	101
33	Mediverse_Innovators	Saee Hemant Patil	8380834612	12:10-12:15	101
34	Dynavim	Nandini Pandey	8888740037	12:15-12:20	101
35	NutriEllas	Srushti Mule	7756854333	12:20-12:25	101
36	CodeNinja	Chaitali Nigade	8010672185	12:25-12:30	101
37	Electro Elites	Niharika Naik	8999932884	12:30-12:35	101
38	Athena	Tanvi Durshetwar	8080268477	12:35-12:40	101
39	Wednesday_Hackos	Prajakta Mhetre	8484990709	12:40-12:45	101
40	Codivine	Neha Bhosale	9403535075	12:45-12:50	101

Bharati Vidyapeeth's College of Engineering for Women, Pune-43[OBJ]
Smart India Hackathon 2024

Preliminary Internal Evaluation Schedule

Team No.	Date	Duration	Venue	Panel Members
1-10	6th September, 2024	9 am to 10 am	101	Prof. P. D. Kale, Prof. Dr. S. A. Dhole, Prof. M. A. Rane, Prof. A. D. Khairkar
11-20		10 am to 11 am		
21-30		11 am to 12 am		
31-40		12 am to 01 pm		

Photos:

Photo: Students discussing about finalization of problem statements

Bharati Vidyapeeth's College of Engineering for Women, Pune-43

Smart India Hackathon 2024

Idea Presentation: Internal Hackathon Schedule

Date: 13th September, 2024

Gr. No.	Team Name	Team Leader Name	Mobile No.	Time	Venue
1	TechHex6	Apurva Nangare	8380944572	9:00-9:15	205
2	AUTOMINDS	Riddhi Baldwa	8956310789	9:15-9:30	205
3	Digital Gram Sanrakshak	Prachi Kad	7385518639	9:30-9:45	205
4	VOCATIONAL_VANGUARDS	Gayatri Temgire	9579717037	9:45-10:00	205
5	SevaPulse	Manasi Khaire	9922933344	10:00-10:15	205
6	SANCHARA	Malishka Salke	8407976394	10:15-10:30	205
7	RoutetoRoots	Siddhi Algude	8554962123	10:30-10:45	205
8	YUKTI	Sunita Pawar	77700 97718	10:45-11:00	205
9	AYUSH_Archiver	Parivita Sampagaonkar	9545731750	11:15-11:30	205
10	Hackteam_66	Sakshi Pandey	9626566391	11:30-11:45	205

11	Code_Command os	Riddhi Taharabadkar	9552741043	11:45-12:00	205
12	Fake_Busters	Pratiksha Kadam	8010406098	12:00-12:15	205
13	AVINYA	Janhavi Sharma	7083327668	12:15-12:30	205
14	Tech_Genesis	Farin Attar	8432412005	12:30-12:45	205
15	Ignis_Core	Sharayu Tekade	9658766962	12:45-13:00	205
16	InnoSphere X	Ayesha Shaikh	7499817376	13:00-13:15	205
17	TechTalk	Chetana Patil	9325575205	14:00-14:15	205
18	INSIGHT_INNO VATORS	Sakshi Jadhav	9322304361	14:15-14:30	205
19	GLITCH_SQUA D	Rutakshi Sakhare	9175013511	14:30-14:45	205
20	AGRIYOS	Vedika Shinde	9359628714	14:45-15:30	205
21	The_Civic_Guid es	Tanvi Gaonkhadkar	9356742368	9:00-9:15	206
22	Fake_detector	Shivknya Arote	9322918813	9:15-9:30	206
23	R3d_Seika	Samruddhi Badgujar	8275110690	9:30-9:45	206
24	CodeX11	Prerana Bhokare	8767821245	9:45-10:00	206
25	TECH_TITANS	Shreya Choudhury	9801965787	10:00-10:15	206
26	Trash2Tech	Tanaya More	9529010774	10:15-10:30	206
27	Techno_femmes	Dhanshree Memane	7350469455	10:30-10:45	206
28	Risers27	Ameya Anil Nimkar	9730347525	10:45-11:00	206
29	AEKYAMS	Shriya Bhan	6005652005	11:15-11:30	206
30	FertiBoost	Shravani Mardane	7020239728	11:30-11:45	206

31	Computer_Insiders	Ishika Thakur	8999109859	11:45-12:00	206
32	HavocHelpers	Vaishnavi Shinde Patil	9371639450	12:00-12:15	206
33	Mediverse_Innovators	Saee Hemant Patil	8380834612	12:15-12:30	206
34	Dynavim	Nandini Pandey	8888740037	12:30-12:45	206
35	NutriEllas	Srushti Mule	7756854333	12:45-13:00	206
36	CodeNinja	Chaitali Nigade	8010672185	13:00-13:15	206
37	Electro Elites	Niharika Naik	8999932884	14:00-14:15	206
38	Athena	Tanvi Durshetwar	8080268477	14:15-14:30	206
39	Wednesday_Hackos	Prajakta Mhetre	8484990709	14:30-14:45	206
40	Codivine	Neha Bhosale	9403535075	14:45-15:30	206

Bharati Vidyapeeth's College of Engineering for Women, Pune-43

Smart India Hackathon 2024

About the Problem Statement

Sr. No.	Problem Statement Code	Problem Statement Title	Total no. of teams attempted Problem Statement	Total no. of Shortlisted teams
1	SIH 1609	Implementation of the Alumni Association platform for the University/Institute.	02	02
2	SIH 1536	Student Innovation	01	01
3	SIH 1705	Development and Optimization of AI model for Feature identification/ Extraction from drone orthophotos.	01	01
4	SIH1667	Integrate Industry-Relevant Vocational Training into Elementary and Secondary Education Curriculum	01	01
5	SIH1597	Personalized Application which provides Nutritional Advice and Ayurvedic Remedies to different age group of Women based on their Menstrual Cycle	02	01
6	SIH1598	Ideas that showcase the rich cultural heritage and traditions of India	03	02
7	SIH1751	Dashboard for Swachhta and LiFE. Develop a dashboard aimed at maintaining cleanliness and LiFE practices, integrating AI-powered image	01	01

		processing techno		
8	SIH1555	Create a Virtual Herbal Garden that provides an interactive, educational, and immersive experience to users, showcasing the diverse range of medicinal plants used in AYUSH	03	03
9	SIH 1624	To develop an Artificial Intelligence (AI) based model for electricity demand projection including peak demand projection for Delhi Power system	01	01
10	SIH 1633	Intelligent platform to Interconnect Alumni and Student for Technical Education Department	01	01
11	SIH 1775	Fake Social Media Account and their Detection	02	01
12	SIH 1645	An app and web based software for Productivity and safety management of coal mines.	01	01
13	SIH 1743	Parsing of Social Media Feeds	01	01
14	SIH 1001	Inefficiencies in the NOC application process for fire department	01	01
15	SIH 1537	Student Innovation	01	01
16	SIH 1648	Online Chatbot based ticketing system for museum	01	01
17	SIH 1545	Development of a non-electrical device for tracking the movement of the sun for movement of the solar panels, increasing their efficiency.	01	01
18	SIH 1638	AI Driven Crop Disease Management	01	01
19	SIH 1699	Let's learn Constitution in a Simpler Manner -Institution perspective	01	01
20	SIH 1637	Mobile App for Direct Market Access for Farmers	01	01
21	SIH 1599	Fitness and Sports	02	01
22	SIH 1728	Development of a Paperless Scholarship Disbursement System for PMSSS	01	01
23	SIH 1588	Efficient Management of E-Waste	01	01
24	SIH 1639	Sustainable Fertilizer Usage	02	01
25	SIH 1586	Student innovation	01	01
26	SIH 1566	Enhacing body detection in CSSR operations	02	00

		using Advanced Technology		
27	SIH1620	Queuing models in OPDs/ availability of beds/ admission of patients. A hospital based solution is ideal which can be integrated with city wide module	01	01
28	SIH 1591	A solution/idea that can boost the current situation of the tourism industries including hotels, travel and others.	01	01
29	SIH 1703	Let's Learn constitution in a Simpler manner-Citizen perspective	01	00
30	SIH 1533	Student Innovation	01	00

Bharati Vidyapeeth's College of Engineering for Women, Pune-43

Smart India Hackathon 2024

Jury Information

Jury Photograph	Jury's Profile
Mr. Rahul Bal (External Jury)	Mr. Rahul Bal is a Data Analyst at Nihilent with 11 years of experience in both teaching and industry. He holds an M.Tech in Electronics and Telecommunications and has a strong interest in data engineering, data analytics, and machine learning. He also specializes in application development and its end-to-end delivery.
Prof. Dr. S. A. Dhole (Internal Jury)	Prof. Dr. S. A. Dhole, working as an Assistant Professor, has completed her Ph.D. in Electronics from Bharati Vidyapeeth (deemed to be University), College of Engineering, India in 2017 with specialisation in Image Processing and Biometrics. She has published more than 30 research papers, including 7 scopus indexed. She has filed 2 patents and 1 copyright. She has worked as Reviewer for many International and National conferences.
Prof. P. D. Kale (Internal Jury)	Prof. Pranoti Kale works as Associate Professor, Computer Engineering department. She has 4.5 years of Industrial experience and 22+ years of Academic experience. Recently in March 2024, her project was in in Top 3 Ranking in NES Innovation Awards and received award by the hands of Padmavibhushan Dr Raghunath Mashelkar. Her domain is Machine Learning, Data Science.

Prof. Dr. K. A. Malgi (Internal Jury)	Prof. Dr. Ketki Amit Malgi working as an Associate Professor in the Information Technology department. She has completed her Ph.D. in 2020. She has more than 20 years of teaching experience. She published more than 10 papers published in reputed international journals. Her domain is Cloud Computing and AIML. She has worked as Reviewer for many International and National conferences.

Bharati Vidyapeeth's College of Engineering for Women, Pune-43

Smart India Hackathon 2024

Internal Hackathon Photograph

Photo: Principal Dr. P.V. Jadhav Sir appreciating and motivating participating teams

Photo: Principal Prof. Dr. P. V. Jadhav, SPOC M. A. Rane along with Jury Members and participating teams

Photo: CodeX11 team explaining their idea
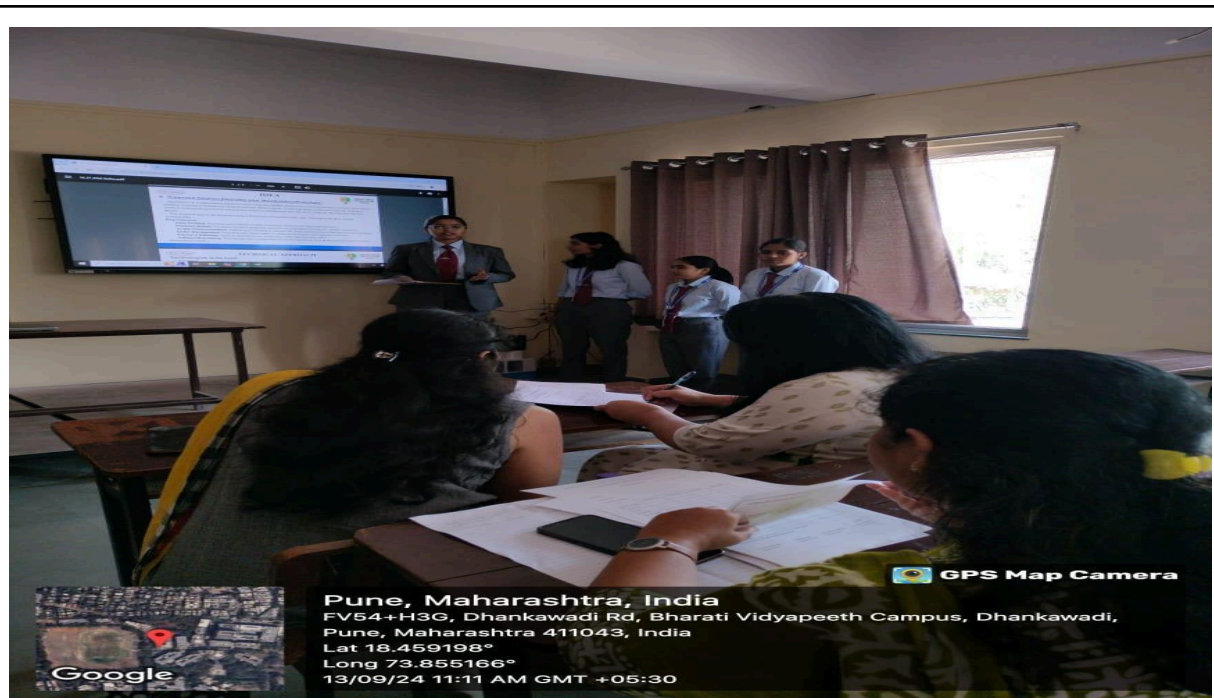
Team: Aekyam presenting their idea to Juries

Photo: Mr. Rahul Bal giving common guidelines to participating teams

Bharati Vidyapeeth's College of Engineering for Women, Pune-43

Smart India Hackathon 2024

Participation Statistics

Total no . of Registration	40
Total no. of Participants	240
Total no. of Female participant	240

Bharati Vidyapeeth's College of Engineering for Women, Pune-43

Smart India Hackathon 2024

Nominated Top Teams

Team. No.	Team Name	Problem Statement ID	Team Leader Name	Mobile No.	Class
1	TechHex6	SIH1609	Apurva Nangare	8380944572	BE(IT)
2	AUTOMINDS	SIH1536	Riddhi Baldwa	8956310789	BE(E&TC)
3	Digital Gram Sanrakshak	SIH1705	Prachi Kad	7385518639	BE(Computer)
4	VOCATIONAL_ VANGUARDS	SIH1667	Gayatri Temgire	9579717037	BE(Computer)
5	SevaPulse	SIH1597	Manasi Khaire	9922933344	BE(Computer)
6	SANCHARA	SIH1598	Malishka Salke	8407976394	BE(Computer)
8	YUKTI	SIH1751	Sunita Pawar	77700 97718	BE(Computer)
9	AYUSH_Archiver	SIH1555	Parivita Sampagaonkar	9545731750	TE(Computer)
10	Hackteam_66	SIH1624	Sakshi Pandey	9626566391	TE(Computer)
11	Code_Commandos	SIH1633	Riddhi Taharabadkar	9552741043	TE(Computer)
12	Fake_Busters	SIH1775	Pratiksha Kadam	8010406098	TE(E&TC)
13	AVINYA	SIH1645	Janhavi Sharma	7083327668	TE(IT)

14	Tech_Genesis	SIH1743	Farin Attar	8432412005	TE(IT)
15	Ignis_Core	SIH1001	Sharayu Tekade	9658766962	TE(IT)
17	TechTalk	SIH1648	Chetana Patil	9325575205	TE(IT)
18	INSIGHT_INNOVATORS	SIH1545	Sakshi Jadhav	9322304361	TE(IT)
19	GLITCH_SQUAD	SIH1555	Rutakshi Sakhare	9175013511	TE(E&TC)
20	AGRIYOS	SIH1638	Vedika Shinde	9359628714	TE(IT)
21	The_Civic_Guides	SIH1699	Tanvi Gaonkhadkar	9356742368	SE(IT)
23	R3d_Seika	SIH1637	Samruddhi Badgujar	8275110690	SE(IT)
24	CodeX11	SIH1599	Prerana Bhokare	8767821245	SE(E&TC)
25	TECH_TITANS	SIH1728	Shreya Choudhury	9801965787	SE(E&TC)
26	Trash2Tech	SIH1588	Tanaya More	9529010774	SE(E&TC)
27	Techno_femmes	SIH1609	Dhanshree Memane	7350469455	SE(Comp)
28	Risers27	SIH1609	Ameya Anil Nimkar	9730347525	SE(IT)
29	AEKYAMS	SIH1555	Shriya Bhan	6005652005	SE(Comp)
30	FertiBoost	SIH1639	Shravani Mardane	7020239728	SE(Comp)
31	Computer_Insiders	SIH1586	Ishika Thakur	8999109859	SE(Comp)
33	Mediverse_Innovators	SIH1620	Saee Hemant Patil	8380834612	TE(E&TC)
34	Dynavim	SIH1591	Nandini Pandey	8888740037	SE(IT)
35	NutriEllas	SIH1597	Srushti Mule	7756854333	BE(IT)

Smart India Hackathon 2023

About the internal competition

Bharati Vidyapeeth's College of Engineering for Women, Pune-43 has Organized internal competition for Smart India Hackathon 2023 on 26th September, 2023. Total 25 groups are registered for participation in the internal Hackathon. The internal competition was conducted at 2 venues.

Total 4 jury members are allocated for 25 groups. 1 External Jury member was invited from Vishwakarma University, Pune and 3 internal Jury Members were invited from E&TC, Computer and IT department.

All participants registered through the department project coordinators. The event was conducted in offline mode. Total participating students were 150. All were female participants. Out of 25 participant teams, Jury identified 21 top teams.

Notice For smart India Hackathon 2023

Date : 14th Sept. 2023

Circular about Smart India Hackathon 2023

The student project group who are interested in registration for Smart India Hackathon 2023, give your team details to your department project coordinator.
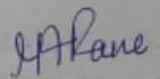
The last date for internal competition registration is 20th Sept. 2023. For any queries, please contact Ms. Mugdha Rane (9960377521).

Guidelines for Participants:

1. Each team should consist of six members.
2. The choice of Problem statements could be from any theme or from the problem statement which is already published on the official SIH-2023 website https://www.sih.gov.in/

Timeline of SIH 2023

- Launch of Smart India Hackathon: 23rd August 2023.
- Internal competition: 26th September 2023
- Registration & Idea Submission: 23rd August 2023 - 30th September 2023.
- Idea Evaluation: 16th September 2023 - 15th October 2023.

Ms. Mugdha A. Rane
SIH2023-SPOC

Prof. Dr. S. R. Patil
Principal

Bharati Vidyapeeth's College of Engineering for Women, Pune-43

Smart India Hackathon 2023

Internal Competition Schedule

Sr. No.	Team Name	Department	Team Leader Name	Time	Venue
1	Day_Dreamers	IT	Krupa Desai	11.15-11.30	008
2	avengHERs	IT	Prajwal Said	11.30-11.45	008
3	Technominds	IT	Anam Bagwan	11:45-12:00	008
4	Tech Tinkers	IT	Trupti Pacharne	12:00-12:15	008
5	Made4Innovation	IT	Mrunmai Watane	12.15-12.30	008
6	HexaCoders	IT	Kirti Dattatray Mhaske	12.30-12.45	008
7	InnovateHers	Comp	Aqsa Shaikh	12:45-01:00	008
8	Vibranti Drishyakari	Comp	Suneha deep kour	1:00-1:15	008
9	HackDetect Wizards	Comp	Shruti Thakur	2:00-2:15	008
10	Project Pioneers	Comp	Prajakta Tanaji Rupanavar	2:15-2:30	008
11	The Blocksmiths	Comp	Madura Dixit	2:30-2:45	008
12	Floodplain Guardians	Comp	Ahilya Bandgar	2:45-3:00	008
13	SakshiGroup	Comp	Aditi Ahire	3:00-3:15	008
14	MahakGroup	Comp	Sejal Bora	3:15-3:30	008
15	CyberGuardians	E&TC	Dhanashree Kadam	11.15-11.30	301
16	bvcoew_wizards	E&TC	Chetana Mahesh Dusane	11.30-11.45	301
17	bvcoew_techbugs	E&TC	Gavali Anjali	11:45-12:00	301
18	bvcoew_mind space	E&TC	Srushti Galande	12:00-12:15	301
19	BVCOEW_translat	E&TC	Shravani Deshmukh	12.15-12.30	301

	ors					
20	BVCOEW_STRIKERS	E&TC	Anjali Meshram	12.30-12.45	301
21	BVCOEW_ Be Healthy	E&TC	Kshirsagar Shweta	12:45-01:00	301
22	BVCOEW - TechSketch	E&TC	More Komal	1:00-1:15	301
23	Open Source	E&TC	Minal Chaudhari	2:00-2:15	301
24	Bvcoew_Automation	E&TC	Rutuja Dhavale	2:15-2:30	301
25	Bvcoew_innovators	E&TC	Shruti Singh	2:30-2;45	301

About the Problem Statement

Gr. No.	Problem Statement Code	Problem Statement Title
1	SIH1480	Ideas that showcase the rich cultural heritage and traditions of India
2	SIH1516	Suggest an Al-based solution to enable ease of grievance lodging and tracking for citizens across multiple departments
3	SIH1479	Cutting-edge technology in these sectors continues to be in demand. Recent shifts in healthcare trends, growing populations also present an array of opportunities for innovation.
4	SIH1492	AI driven food safety using ocr
5	SIH1301	Language translator tool to convert English to Hindi
6	SIH1401	App based solution to identify and solve disease in plants/crops
7	SIH1509	App-Based Solution to provide market access to micro and small enterprises
8	SIH1357	Sentiment analysis of social media presence

9	SIH1358	Image correctness for a product on marketplace
10	SIH1334	Real-Time Medicinal Plant Identification for Sustainable Healthcare in India
11	SIH1365	Online Blockchain based certificate generation and validation system for government organization
12	SIH1289	Projection of the extent of inundation corresponding to the forecasts of flood levels in a river.
13	SIH 1283	Development of gamified platform on Children's Rights to increase legal literacy and awareness among children in India
14	-	Identifying security threats and legitimate status
15	SIH1388	Detection of Malware in softwares
16	SIH1492	lung cancer stage detection
17	SIH1492	SEMG based Finger Gesture Recognition using CNN
18	SIH1479	Deep learning based depression analysis using EEG signal
19	SIH1301	Translate language from English to German
20	SIH1454	Smart Queue Management by real time using DNN
21	SIH 1492	Liver disease Prediction Using Machine Learning
22	SIH-1483	Face Sketch Creation and Recognition
23	SIH1495	Object Detection with deep learning and open cv
24	SIH1470	Iot-Based temperature and light control system using raspberry-pi.
25	SIH1492	Enhancing Hand Gesture Recognition with Discrete Wavelet Transform and Autoencoder Neural Networks for sEMG Signals

Jury Information

Jury Photograph	Jury Information
Dr. S. S. Thite	Prof. Dr. S. S. Thite is working as an Assistant Professor in the Computer department of Vishwakarma University. Ministry of Electronics and Information Technology, Government of India, Ph.D. incentive grant of Rs.2,50,000/- for successful completion of the Ph.D. under Visvesvaraya PhD Scheme for Electronics & IT. Year 2022.
Prof. S. T. Khot	Prof. Sucheta Tirtharaj Khot has been working as a Professor in the E & TC department since July 2002. She completed her M.E. (Elex.) She has 28 years of teaching experience. She has received the Dr.Amitabh Bhattacharya Memorial Trophy. She also fetched various grants.
Prof. Dr. K. A. Malgi	Prof. Dr. Ketki Amit Malgi working as an Associate . Professor in the Information Technology department. She has completed her Ph.D. in 2020. She has more than 20 years of teaching experience. She published more than 10 papers published in reputed international journals. Her domain is Cloud Computing and AIML.
Prof. S. B. Jadhav	Prof. Sheetal Balasaheb Jadhav working as an Asst. Professor in the Computer department since August, 2006. She completed her M.Tech (Computer) and is currently pursuing Ph.D.

Jury Evaluation Sheet

(any two)

Bharati Vidyapeeth's College of Engineering for Women, Pune-43

Smart India Hackathon 2023

Evaluation Form

Date: 26th September, 2023

Group Name: Day Dreamers.

Problem Statement: SIH 1480

	Assessment1	Assessment2	Assessment3
Novelty of Idea	7	8	7
Complexity	8	9	8
Details	7	7	7
Feasibility	5	6	6
Practicability	8	7	7
Sustainability	7	7	7
Scale of Impact	7	7	7
User Experience	9	8	8
Potential for Future Work	8	9	8

Overall Remark: Students want to work on Image dataset.

Sign: Prof. Khot. S. T.
prof. SA. karande
Dr. S.S Thite
26/9/23

Bharati Vidyapeeth's College of Engineering for Women, Pune-43

Smart India Hackathon 2023

Evaluation Form

Date: 26th September, 2023

Group Name: Technominds.

Problem Statement: SIH 1992

	Assessment1	Assessment2	Assessment3
Novelty of Idea	9	9	8
Complexity	8	8	8
Details	8	8	8
Feasibility	8	8	8
Practicability	8	9	8
Sustainability	8	9	9
Scale of Impact	9	9	9
User Experience	9	9	9
Potential for Future Work	10	10	9

Overall Remark: Compare it with existing Card.

Sign: Dr. S.S. Thite
Prof. Khot S. T. 26/9/23
prof. karende S.A. 26/9/23

SIH Internal Competition Photograph

Pune, Maharashtra, India
FV54+M3C, Pune - Satara Rd, Bharati Vidyapeeth Campus,
Dhankawadi, Pune, Maharashtra 411043, India
Lat 18.459186°
Long 73.855183°
26/09/23 11:40 AM GMT +05:30

Pune, Maharashtra, India
FV54+M3C, Pune - Satara Rd, Bharati Vidyapeeth Campus,
Dhankawadi, Pune, Maharashtra 411043, India
Lat 18.459186°
Long 73.855183°
26/09/23 11:43 AM GMT +05:30

Pune, Maharashtra, India
FV54+M3C, Pune - Satara Rd, Bharati Vidyapeeth Campus,
Dhankawadi, Pune, Maharashtra 411043, India
Lat 18.459186°
Long 73.855183°
26/09/23 11:55 AM GMT +05:30

Participation Statistics

Total no . of Registration	25
Total no. of Participants	150
Total no. of Female participant	150

Nominated Top Teams

Sr. No.	Team Name	Team Leader Name
1	Day_Dreamers	Krupa Desai
2	avengHERs	Prajwal Said
3	Technominds	Anam Bagwan
4	Tech Tinkers	Trupti Pacharne
5	Made4Innovation	Mrunmai Watane
6	HexaCoders	Kirti Dattatray Mhaske
7	InnovateHers	Aqsa Shaikh
8	Vibranti Drishyakari	Suneha deep kour
9	HackDetect Wizards	Shruti Thakur
10	Project Pioneers	Prajakta Tanaji Rupanavar
11	The Blocksmiths	Madura Dixit
12	Floodplain Guardians	Ahilya Bandgar
13	CyberGuardians	Dhanashree Kadam
14	bvcoew_wizards	Chetana Mahesh Dusane
15	bvcoew_mind space	Srushti Galande
16	BVCOEW_translators	Shravani Deshmukh
17	BVCOEW_STRIKERS	Anjali Meshram
18	BVCOEW_ Be Healthy	Kshirsagar Shweta
19	BVCOEW - TechSketch	More Komal
20	Bvcoew_Automation	Rutuja Dhavale
21	Bvcoew_innovators	Shruti Singh

Ref. No. BVICOEW1540/2025-26

Date: 10 / 09 / 2025

AVISHKAR 2025

To,

The Avishkar Planning Committee,

Internal Quality Assurance Cell,

Savitribai Phule Pune University,

Pune

Sub:- Report on Avishkar-2025 College Level Project Competition

Dear All,

Season's Greetings!

The College Level *Avishkar-2025 Project Competition* was organized by **Bharati Vidyapeeth's College of Engineering for Women, Pune,** on **10th September 2025**. The event aimed to encourage students to participate in research-oriented activities and present innovative ideas. Prof. Dr. V.K. Bairagi and Mr. Divekar were the experts from AISSMS,IOIT,Pune Geminus Tech Pvt. Ltd.,Pune

A total of **12 groups** participated in the competition, out of which **4 groups were selected for the Zonal Level Competition.** Students showcased their projects through models, prototypes, and research presentations, addressing socially relevant problems with practical solutions. The detailed report is attached herewith

Thank You for giving us the opportunity to organize Avishkar 2025.

ARC

Prof. Dr. Vijaya R. Pawar

Academic & Research
Coordinator (ARC)
BVCOEW, Pune-43.

Principal

Prof. Dr. Pradeep V. Jadhav

PRINCIPAL

Bharati Vidyapeeth's

College of Engineering for Women

Pune-Satara Road, Pune-411043.

INDEX

Sr.No	Particulars
1	List of Selected Projects
2	Abstract/ Poster
3	Geo Tagged Photographs
4	Evaluation Sheet
5	Invitation letter/ Gratitude letters
6	Honorarium
7	Summary
8	Video/Audio clip

Bharati Vidyapeeth's
College of Engineering for Women, Pune -43

AVISHKAR-2025

Sr. No	Category	Level
		UG
1	Engineering & Technology	04

List of Selected Projects

Poster No.	Name	Domain	Title of project
1	Shreya Devsale Pushpa Ghate Aditi Kulkarni	Artificial intelligence and Miot	Industrial vibration anomaly detection using Ai and miot
2	Pooja Chavan Shraddha Kakade Sakshi Khamkar	Deep Learning	Real time Deep Learning based ECG Signal Denoising with Efficient Filtering for Reliable Cardiac Monitoring
3	Jagruti Kumbhar Gayatri Khedkar Shravani Jagtap Shweta Deshmukh	Deep Learning	Geospatial vulnerability mapping of Glaciar lake in Indian Himalayas using area volume elevation and type glacial lakes
4	Aarya Balpande Tanisha Nipunge Ishwari Patil Vedika Shinde	Deep Learning	Non Invasive Glucose estimation using machine Learning Model and PPG

Project Title: Industrial vibration anomaly detection using Ai and miot

ABSTRACT

Industrial machinery is a critical component of modern manufacturing systems, and its unexpected failure can lead to significant downtime, financial losses, and safety hazards. One of the most reliable indicators of a machine's health is its vibration signature. Subtle changes in vibration patterns often occur well before a major fault, making vibration analysis an effective tool for predictive maintenance. However, traditional approaches to vibration monitoring are either manual or rely on threshold-based techniques, which lack accuracy, scalability, and the ability to provide timely insights. This project focuses on developing an Industrial Vibration Anomaly Detection System using Artificial Intelligence (AI) and Machine Internet of Things (MIoT). The system integrates vibration sensors with IoT-enabled hardware to continuously capture machine vibration data. The collected data is transmitted to a cloud-based platform, where advanced AI algorithms process and classify the signals. By distinguishing between normal and abnormal vibration patterns, the system provides real-time alerts whenever an anomaly is detected. The proposed solution offers multiple advantages over conventional systems. It not only detects faults at an early stage but also enables predictive maintenance, thereby reducing downtime by minimizing unexpected failures. Additionally, the IoT-based architecture allows remote monitoring, making it suitable for large-scale industrial deployments. The system's AI model has achieved high accuracy in identifying anomalies, demonstrating its effectiveness in real-world conditions. In conclusion, this project provides a smart, scalable, and cost-effective approach to industrial vibration monitoring, ensuring improved machine reliability, enhanced safety, and greater operational efficiency in modern industries.

INDUSTRIAL VIBRATION ANOMALY DETECTION USING AI AND MIOT

PROBLEM STATEMENT

The problem is to develop an industrial vibration anomaly detection using AI and MIoT, which accurately detect an machine failures.

INTRODUCTION

Industrial machinery is the backbone of many manufacturing processes, and any unexpected failure can lead to costly downtime and production losses. By using this project, we can detect one of the earliest signs of machine failure, abnormal vibration patterns and take action before serious damage occurs.

In this project, we aim to design an AI-based system that can detect such vibration anomalies in real-time.By analyzing sensor data using machine learning algorithms, we can identify abnormal patterns and alert operators before a major failure occurs

This approach not only improves maintenance efficiency but also enhances overall safety and reliability in industrial environments.

OBJECTIVES

1.Detect anomalies and identify machine faults

2.Enable predictive maintenance using AI algorithms

3.Improve safety and reliability in industries

4.Provide real-time monitoring of machine health

5.Support data-driven decision-making for maintenance

LITERATURE SURVEY

Sr. No.	Author	Technologies used	Pros	Cons
1.	Chen H-Y, Lee C-H. (IEEE Access, Vol.8,July 2020.)	Vibration Signals Analysis by AI Approach: Application on Bearing Faults Diagnosis	1.early fault detection 2.high accuracy 3.validation with multiple approach	1.overfitting risks 2.narrow application 3.Computation heavy
2.	Furusawa T, Premachandra C. (IEEE Sensors Journal. 2025).	AI-Based Bolt/Nut Looseness Sensing Using Spectrogram Images of Shaft Vibrations	1.High Accuracy 2.Lightweight Models 3.Scalability 4.Detailed Diagnosis	1. Frequency Sensitivity 2.Generalization Challenges 3.Environmental Noise

BLOCK DIAGRAM

EXPECTED RESULT

The expected output of this project is a smart industrial monitoring system that integrates AI and IoT to detect vibration anomalies in machines. IoT sensors collect real-time vibration data, which is analyzed using AI algorithms to identify unusual patterns indicating possible faults. The system sends instant alerts to operators through a connected dashboard or mobile application. This ensures early detection of issues, reduces unplanned downtime, improves maintenance planning, lowers costs, increases machine lifespan, and enhances industrial safety and efficiency.

ADVANTAGES

1.Real-time monitoring of machines

2.Early detection of faults and failures

3.Reduced downtime and maintenance costs

4.Increased equipment lifespan

5.Improved workplace safety
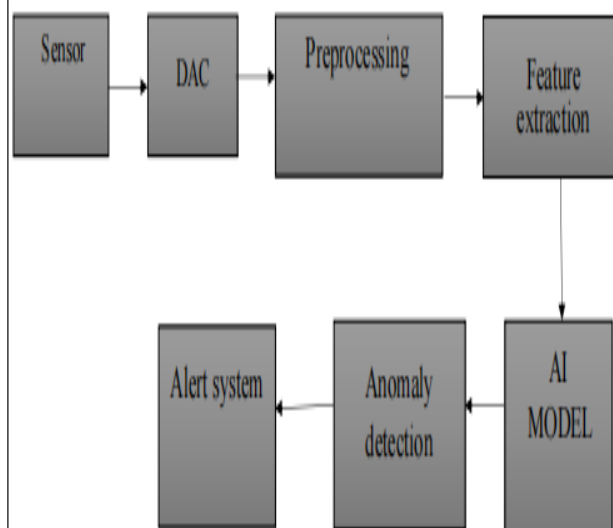
REFERENCES

1. Chen H-Y, Lee C-H. "Vibration Signals Analysis by Explainable Artificial Intelligence (XAI) Approach: Application on Bearing Faults Diagnosis" IEEE Access, Vol. 8,July 2020,https://ieeexplore.ieee.org/document/913169 2

2. McDonald CP, Collins K, Cassidy N, Taylor GJ. "Robots and Tools for Remodeling Bone " Supported by Innovative Manufacturing Cooperative Research Center

Project Title: Real time Deep Learning based ECG Signal De-noising with Efficient Filtering for Reliable Cardiac Monitoring

Cardiovascular diseases are the leading cause of mortality in India, responsible for nearly one in four deaths. Continuous and reliable monitoring through Electrocardiogram (ECG) signals is essential for early diagnosis and timely treatment. However, ECG signals are weak (0.5–100 Hz) and highly prone to noise such as baseline wander (<0.5 Hz), power line interference (50 Hz), and motion artifacts (up to 100 Hz). Conventional filtering methods like FIR, IIR, and FFT reduce certain noise types but often distort critical features such as the P-wave, QRS complex, and T-wave, reducing diagnostic accuracy.

This project proposes a deep learning–assisted ECG denoising system that adaptively eliminates multiple noise sources while preserving key morphological features. The approach integrates preprocessing, wavelet transforms, and neural networks to ensure clarity, reliability, and efficiency under real-time conditions. Unlike traditional filters, the system effectively handles complex motion artifacts without compromising diagnostic details.

From a social perspective, this innovation addresses the growing burden of heart disease in India by offering a reliable solution that can be adopted in hospitals, clinics, and community health centers. By improving diagnostic accuracy and accessibility, it supports early detection, reduces preventable cardiac deaths, and contributes to strengthening public healthcare outcomes.
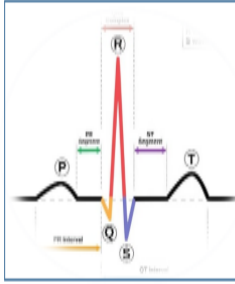
To design and develop deep learning based ecg signal denoising with efficient filtering for reliable cardiac monitoring and analysis
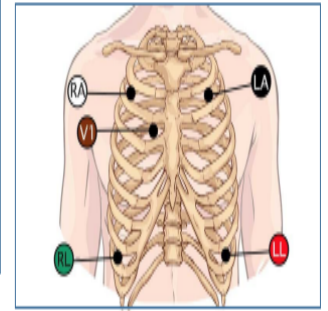
Introduction

This project develops a real-time deep learning–based ECG denoising system that removes multiple noise sources while preserving diagnostic features. It enables instant and reliable detection of cardiac abnormalities, making it suitable for wearable's, telemedicine, and emergency use. With its low-cost and portable design, it can improve cardiac care access in rural and underserved areas, reducing preventable heart related deaths .

Advantages

1 Real time monitoring
2 High Accuracy
3 Reliable diagnosis
4 Wearable and Scalable

Future Scope

1 Affordable wearable devices for heart patients.
2 Remote ECG monitoring in rural India.
3 Noise-free telemedicine for accurate diagnosis.
4 Early detection to reduce cardiac deaths.
5 Support for public health programs like Ayushman Bharat.

ECG Denoising Block Diagram

- ECG Signal Acquisition
- Pre-processing (e.g., Band-pass Filter)
- Noise Detection (Baseline Wander, Powerline, Muscle Noise)
- Denoising Techniques → Wavelet Denoising → Adaptive Filtering → Deep Learning Models (CNN, Autoencoder)
- Post-processing (Smoothing, Additional Filtering)
- Evaluation (Signal Quality, Diagnostic Accuracy)

Efficient Filtering for Reliable Cardiac Monitoring

Objectives

1 Develop a real-time ECG denoising system using deep learning.
2 Preserve critical ECG features (P, QRS, T waves) for accurate diagnosis.
3 Ensure reliable performance in motion and noisy conditions.
4 Enable affordable wearable and portable cardiac monitoring.
5 Contribute to accessible healthcare in rural and underserved regions.

Sr No	Name of author	Paper Title/Reference	Technique used	Advantages	Limitations
1	Muhammad Uzair Zahid, Serkan Kiranyaz, Moncef Gabbouj	Global ECG Classification by self-operational neural networks with feature injection.	Used Self-ONNs + feature injection (morphology + R–R) + multi-scale DWT for global ECG arrhythmia classification.	High accuracy. Compact, Real time robust to new patients.	Lower on rare beats, Dataset limited, Beat-by-beat issue.
2	Muhammad Wasimuddin et al.	Stages-Based ECG Signal Analysis From Traditional Signal Processing to Machine Learning Approaches.	Survey of traditional (filters, wavelets), ML (SVM, KNN), and DL (CNN, RNN, LSTM) in a 4-stage ECG model .	Comprehensive, clear framework, includes real-time/wearables, compares old vs new methods.	High cost (DL), no global standards, dataset limits, can't cover all studies.

Expected Result

1 Noise-free ECG signals with preserved P, QRS, and T waves
2 Higher diagnostic accuracy compared to conventional filters.
3 Real-time performance suitable for wearable and portable devices.
4 Reliable monitoring even under motion or rural conditions.
5 Improved accessibility to affordable cardiac care.

References

1 Zahid et al., 2023M. U. Zahid, S. Kiranyaz, and M. Gabbouj, "Global ECG Classification by Self-Operational Neural Networks With Feature Injection," IEEE Transactions on Biomedical Engineering, vol. 70, no. 1, pp. 176–188, Jan. 2023.
2 Wasimuddin et al., 2020M. Wasimuddin, K. Elleithy, A.-S. Abuzneid, M. Faezipour, and O. Abuzaghleh, "Stages-Based ECG Signal Analysis From Traditional Signal Processing to Machine Learning Approaches: A Survey," IEEE Access, vol. 8, pp. 177782–177803, Sept.

TITLE: Geospatial vulnerability Mapping of Glacial Lakes in the Indian Himalayas Using Area, Volume, Elevation and Type of Glacial Lakes

ABSTRACT:
Climate change is causing glacial lakes in the Indian Himalayas to change quickly, increasing the risk of downstream hazards and outburst floods. Using digital elevation models in Google Earth Engine and multi-mission Landsat imagery, this study creates yearly maps of glacial lakes from 2008 to 2017. While elevation, distance from parent glaciers, and lake type were taken from DEMs and geomorphic data, area and volume were estimated using empirical formulas and polygon delineation. The Glacial Lake Vulnerability Index (GLVI) was calculated using a normalized scoring system. The findings support disaster risk reduction and sustainable water resource management by providing spatial vulnerability mapping.

"Geospatial Vulnerability Mapping of Glacial Lakes in the Indian Himalayas Using Area, Volume, Elevation and Type of Glacial Lakes."

Problem Statement: "Glacial lakes in the Indian Himalayas are expanding rapidly under climate change, increasing the risk of glacial lake outburst floods (GLOFs). However, limited regional-scale assessments integrating lake area, volume, elevation, distance, and type hinder effective vulnerability mapping and disaster preparedness."

Objectives

1. Reviewed literature on glacial lake mapping and vulnerability assessment.
2. Prepared annual glacial lake dataset (2008–2017) using Landsat and DEMs in GEE.
3. Estimate area and volume changes of glacial lakes.
4. Identify potentially hazardous lakes for risk management

Datasets

- **Satellite Imagery:** Landsat 5 TM (2008–2011), Landsat 7 ETM+ (2012), Landsat 8 OLI (2013– 2017).
- **Elevation Data:** DEM (SRTM v3 30m).
- **Lake datasets:** HMA_India (2008–2017) stored as EE assets.
- **Tools:** Google Earth Engine, Python (Geemap, Pandas, Matplotlib),Collab.

Methodology

1. Data Acquisition
2. Pre-processing
3. Lake Mapping
4. Area & Volume Estimation
5. Elevation & Type Assignment
6. GLVI Calculation
7. Visualization
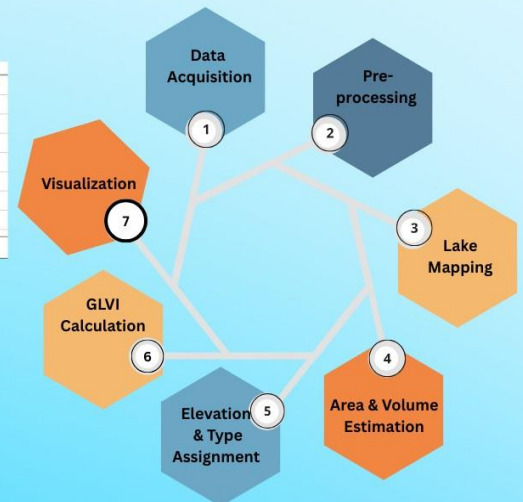
Result
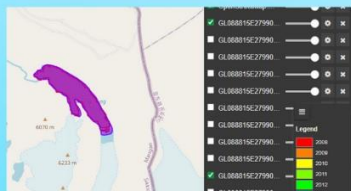
Fig.1 Annual area extracted from polygons (2008–2017).
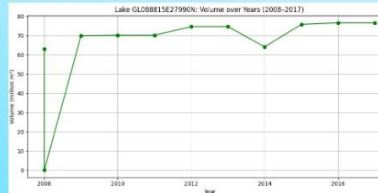
Fig.2 Graphical changes of lake

Fig.3 Indian Himalayan region

Vulnerability Assessment for GL088815E27990N

Lake Type: proglacial lake (Score: 0.4)
Elevation: 5303.00 m (Score: 0.23)
Area Change: 14.8% (Score: 0.15)
Volume Change: 21.6% (Score: 0.22)
Vulnerability Index: 0.24 → Low
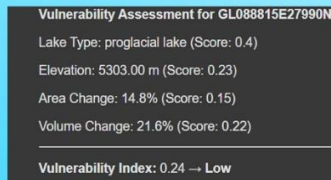
Fig.4 Vulnerability calculation

Conclusion

- Significant expansion of glacial lakes observed between 2008–2017.
- High vulnerability lakes are generally:
- Located at lower elevation
- Close to glaciers
- Moraine-dammed
- Having larger volume and area
- GLVI effectively identifies potential hazard lakes for mitigation planning.
- This study provides crucial data for disaster management, risk reduction, and climate change adaptation in the Himalayas.

References

Chen, F., Zhang, M., Guo, H., Allen, S., Kargel, J. S., Haritashya, U. K., & Watson, C. S., 2021: Annual 30 m dataset for glacial lakes in High Mountain Asia from 2008 to 2017. Earth System Science Data, 13(2), 741–766. doi:10.5194/essd-13-741-2021.

Kaushik, S., Rafiq, M., Dharpure, J. K., Howat, I., Moortgat, J., Joshi, P. K., Singh, T., & Dietz, A., 2024: Increasing risk of glacial lake outburst flood in Sikkim, Eastern Himalaya under climate warming. Remote Sensing Applications: Society and Environment, 36, 101286. doi:10.1016/j.rsase.2024.101286.

Zhang, G., Bolch, T., Allen, S., Linsbauer, A., Chen, W., & Wang, W., 2022: Improving the accuracy of glacial lake volume estimation: A case study in the Poiqu basin, central Himalayas. Journal of Hydrology, 605, 128229. doi:10.1016/j.jhydrol.2022.128229 .

Liu, Z., Yang, C., & Zhao, L., 2025: A mathematical model to improve water storage of glacial lake prediction towards addressing glacial lake outburst floods. Hydrology and Earth System Sciences, 29(2), 733–751. doi:10.5194/hess-29-733-2025.

Zhang, M., Chen, F., & Wang, S., 2023: SpatioTemporal Distribution Characteristics of Glacial Lakes in the Altai Mountains with Climate Change from 2000 to 2020. Remote Sensing, 15(10), 2550. doi:10.3390/rs15102550.

Non Invasive Glucose estimation using machine Learning Model and PPG

ABSTRACT

Diabetes management requires frequent blood glucose monitoring, but traditional invasive methods such as finger pricks are painful and reduce patient compliance. Non-invasive glucometers based on Photo plethysmography (PPG) signals combined with machine learning models provide a reliable alternative. PPG signals, captured using optical sensors, are preprocessed and analyzed with algorithms like Support Vector Machines (SVM), Random Forest, and Neural Networks to estimate glucose levels. This approach ensures painless, accurate, and continuous monitoring, enhancing patient comfort. Furthermore, integration with IoT-based healthcare systems enables real-time tracking and remote medical support, making it highly effective for personalized diabetes management and improving long-term patient outcomes

NON-INVASIVE GLUCOMETER

PROBLEM STATEMENT

Non-Invasive Glucose estimation using Machine Learning model and PPG"

INTRODUCTION

Diabetes management requires regular monitoring of blood glucose levels. Traditional invasive methods are painful and lead to poor patient compliance. A non-invasive glucometer integrated with machine learning models provides an intelligent, accurate, and painless solution. The device uses advanced sensors (e.g., near-infrared spectroscopy), and the data is processed by ML models (SVM, Random Forest, Neural Networks, etc.) to predict glucose levels. This approach enhances patient comfort, enables continuous monitoring, and supports IoT-based remote healthcare systems.

OBJECTIVES

- To explore non-invasive techniques for glucose monitoring.
- To develop a machine learning model that predicts glucose levels without the need for blood samples.
- To reduce patient discomfort and improve continuous monitoring for diabetic patients.
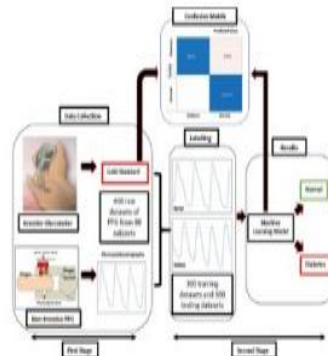
EXPECTED RESULTS

The proposed system is expected to provide:
1) Reliable and accurate glucose estimation
2) Painless and cost-effective monitoring
3) Real-time alerts for abnormal sugar levels
4) Enhanced usability for long-term diabetes management

ADVANTAGES

1) Pain free monitoring
2) Increased compliance
3) Reduced risk of infection
4) Cost-effective
5) Improved accuracy

REFERENCES

1. V. Kumar, A. Divekar, S. Habbu, S. Joshi, A. Joshi and V. H. Dalvi, "Non-invasive blood glucose estimation using a novel white-box model: An interpretable machine learning approach," Biomedical Signal Processing and Control, vol. 105, p. 107520, Jul. 2025.
2. P. Jain, A. M. Joshi, S. P. Mohanty, and L. R. Cenkeramaddi, "Non-Invasive Glucose Measurement Technologies: Recent Advancements and Future Challenges," IEEE Access, vol. 12, pp. 61907–61933, Apr. 2024, doi: 10.1109/ACCESS.2024.3389819.

LITERATURE SURVEY

AUTHOR	TECHNOLOGY USED	ADVANTAGES	LIMITATIONS
Virendra Kumar, Atharva Divekar, Shraddha Habbu, Shrikant Joshi, Aniruddha Joshi, Vishwanath H. Dalvi (2025)	Signal acquisition: PPG + Accu-ChekPreprocessing: Kalman filter, Wavelet, AMPDFeatures: 392 → 26 (area-based) Models: VR (best black-box), PySR (white-box) Validation: RMSE, MAE, R^2, Clarke Error Grid	Strong preprocessing Novel area-based features Reduced features(efficient) High accuracy (VR) Interpretable (PySR) Clinically validated	PySR less accurate Small dataset Black-box not explainable Extreme cases missing
Ali Kermani, Hossein esmaeili (2025)	Optical: NIR, PPG Electrical/Electromagnetic: EIS, MMW, THz Nanotechnology: Nanoparticle sensors Physiological: Transdermal monitoring	Non-invasive & pain-free Low cost, easy to use High sensitivity & specificity	Affected by skin, hydration, temperature, environment Accuracy depends on electrode placement/contact Still needs better reliability & commercialization

FUTURE SCOPE

Development of wearable non-invasive devices for daily use
Continuous glucose monitoring with real-time analysis
Emergency alerts & notifications during abnormal conditions
Integration with IoT and mobile health apps for remote care

BHARATI VIDYAPEETH'S
COLLEGE OF ENGINEERING FOR WOMEN, PUNE
Pune-Satara Road, Dhankawadi, Taluka – Haveli, Dist.- Pune
Accredited by NAAC with "A" Grade, Affiliated to Savitribai Phule Pune University (SPPU)
Approved by DTE. Govt. Of Maharashtra and AICTE, New Delhi
DTE Institute Code-EN6285, Pun Code-PU/PN/Engg. /150/2000
E-mail: -coewpune@bharatividyapeeth.edu   Website: - http://coewpune.bharatividyapeeth.edu

Date: 10 / 09 / 2025

AVISHKAR 2025

Department of Information Technology

Evaluation form

Sr. No.	Poster No.	Relevance (20 Marks)	Methodology opted (20 Marks)	Contribution (20 Marks)	Innovativeness (20 Marks)	Outcome (20 Marks)	Total (100 Marks)
1	1	18	17	19	18	19	85
2	2	19	16	19	13	13	80
3	3	13	15	14	16	12	70
4	4	18	19	17	18	18	90

·Ketan Divekar.
Name of the Expert and Sign

BHARATI VIDYAPEETH'S
COLLEGE OF ENGINEERING FOR WOMEN, PUNE
Pune-Satara Road, Dhankawadi, Taluka – Haveli, Dist.- Pune
Accredited by NAAC with "A" Grade, Affiliated to Savitribai Phule Pune University (SPPU)
Approved by DTE. Govt. Of Maharashtra and AICTE, New Delhi
DTE Institute Code-EN6285, Pun Code-PU/PN/Engg. /150/2000
E-mail: –coewpune@bharatividyapeeth.edu   Website: - http://coewpune.bharatividyapeeth.edu
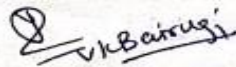
Date: 10 / 09 / 2025

AVISHKAR 2025

Department of E&TC Engg.

Evaluation form

Sr. No.	Poster No.	Relevance (20 Marks)	Methodology opted (20 Marks)	Contribution (20 Marks)	Innovativeness (20 Marks)	Outcome (20 Marks)	Total (100 Marks
1	⊥ ECG	18	15	10	8	5	59
2	2 vibrahon	18	16	12	15	6	67
3	3 mienplastic	18	12	8	8	5	51
4	4 Agricu	18	12	6	6	5	47

VKBairugi

Name of the Expert and Sign

BHARATI VIDYAPEETH'S
COLLEGE OF ENGINEERING FOR WOMEN, PUNE
Pune-Satara Road, Dhankawadi, Taluka – Haveli, Dist.- Pune
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E-mail: -coewpune@bharatividyapeeth.edu   Website: - http://coewpune.bharatividyapeeth.edu

AVISHKAR 2025   Date: 10 / 09 / 2025

Department of Computer Engg.

Evaluation form

Sr. No.	Poster No.	Relevance (20 Marks)	Methodology opted (20 Marks)	Contribution (20 Marks)	Innovativeness (20 Marks)	Outcome (20 Marks)	Total (100 Marks
1	2	16	15	17	16	16.	80
2	3	17	16	18.	17	17	85
3	4	15	14	16.	15	15	75
4							

Name of the Expert and Sign

Mr. ketan Divekar

GEO-TAGGED PGOTOGRAPHS

Pune, Maharashtra, India
Groud Floor, Women's College Of Engineering, Satara Road, Dhankawadi Rd,
Bharati Vidyapeeth Campus, Dhankawadi, Pune, Maharashtra 411043, India
Lat 18.458857° Long 73.855331°
10/09/2025 11:49 AM GMT +05:30

Pune, Maharashtra, India
2, Bharati Vidyapeeth Rd, Bharati Vidyapeeth Campus,
Dhankawadi, Pune, Maharashtra 411043, India
Lat 18.45911° Long 73.855228°
10/09/2025 11:03 AM GMT +05:30

Pune, Maharashtra, India
2, Bharati Vidyapeeth Rd, Bharati Vidyapeeth Campus, Dhankawadi, Pune, Maharashtra
411043, India
Lat 18.459° Long 73.855284°
10/09/2025 01:30 PM GMT +05:30

BHARATI VIDYAPEETH'S
COLLEGE OF ENGINEERING FOR WOMEN, PUNE
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E-mail: -coewpune@bharatividyapeeth.edu   Website: - http://coewpune.bharatividyapeeth.edu

Ref. No.: BV/COEW/   /2025

Date: 30 / 08 / 2025

To,
Dr. V. K. Bairagi
Professor & Dean
AISSMS Institute of Information Technology, Pune

Subject: Invitation as an Expert for *Avishkar 2025* College Level Competition

Respected Sir,

Greetings from Bharati Vidyapeeth's College of Engineering for Women, Pune!

It gives us immense pleasure to invite you as an **Expert/ Judge** for the **College Level** *Avishkar 2025* **Research Competition** to be held at our institute. The competition is organized as per the guidelines of *Savitribai Phule Pune University (SPPU)* with the objective of encouraging innovative ideas and fostering research culture among students.

Event Details:

- **Event:** College Level *Avishkar 2025* Research Competition
- **Date:** Wednesday, 10th September 2025
- **Time:** 9:00 AM onwards
- **Venue:** Bharati Vidyapeeth's College of Engineering for Women, Pune

We will be honoured by your gracious presence and valuable guidance to our participants. Your expertise and insights will surely inspire our students to excel in their research endeavours.

We kindly request you to accept our invitation and grace the occasion.

Looking forward to your positive response.

With warm regards,

Academic and Research Coordinator

Dr. Vijaya R. Pawar

Academic & Research
Coordinator (ARC)
BVCOEW, Pune-43.

Principal
PRINCIPAL
Prof. Dr. Pradeep V. Jadhav
College of Engineering for Women
Pune-Satara Road, Pune-411043.

Ref. No.: BV/COEW/   /2025

Date: 30 / 08 / 2025

To,

Dr. V. K. Bairagi

Professor & Dean

AISSMS Institute of Information Technology, Pune

Subject: Expression of Gratitude for your valuable presence at *Avishkar 2025*

Dear Sir,

On behalf of **Bharati Vidyapeeth's College of Engineering for Women, Pune**, we extend our sincere gratitude to you for kindly accepting our invitation and gracing the **College Level** *Avishkar 2025* **Research Competition** as an **Expert and Judge** on 10th September 2025.

Your esteemed presence, insightful evaluation, and constructive feedback have greatly enriched the event and inspired our students to approach research with deeper enthusiasm and commitment. Your encouragement has truly motivated our young innovators to pursue excellence in their future endeavours.

We deeply appreciate the time and effort you devoted to guiding our participants, and we feel privileged to have benefitted from your expertise. We look forward to your continued association and guidance in our future academic and research initiatives.

With warm regards

Academic and Research Coordinator

Dr. Vijaya R. Pawar

Academic & Research
Coordinator (ARC)
BVCOEW, Pune-43.

Principal

Prof. Dr. Pradeep V. Jadhav

PRINCIPAL
Bharati Vidyapeeth's
College of Engineering for Women
Pune-Satara Road, Pune-411043.

BHARATI VIDYAPEETH'S
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E-mail: -coewpune@bharatividyapeeth.edu   Website: - http://coewpune.bharatividyapeeth.edu

Ref. No.: BV/COEW/   /2025
Date: 10 / 09 / 2025

To,
Mr. Ketan Divekar,
Geminus Tech Pvt. Ltd. ,
Pune.

Subject: Invitation as an Expert for *Avishkar 2025* College Level Competition
Respected Sir,
Greetings from Bharati Vidyapeeth's College of Engineering for Women, Pune!
It gives us immense pleasure to invite you as an **Expert/ Judge** for the **College Level**
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Your expertise and insights will surely inspire our students to excel in their research
endeavours.
We kindly request you to accept our invitation and grace the occasion.
Looking forward to your positive response.
With warm regards,

Prof. Dr. Ketaki Malgi
Project Coordinator

Prof. Dr. D. A. Godse
HOD IT

HEAD OF DEPT.

Ref. No.: BV/COEW/   /2025
Date: 10 / 09 / 2025

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Mr. Ketan Divekar,
Geminus Tech Pvt. Ltd. ,
Pune.

Subject: Expression of Gratitude for your valuable presence at *Avishkar 2025*

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With warm regards

Prof. Dr. Ketaki Malgi
Project Coordinator

Prof. Dr. D. A. Godse
HOD IT

HEAD OF DEPT.
Information Technology
BV'S College of
Engineering For Women
Pune-411 043

Receipt 1

भारती विद्यापीठाचे
महिला अभियांत्रिकी महाविद्यालय
कात्रज–धनकवडी, पुणे – ४११ ०४३.

पावती नंबर

खर्चाची पावती

मा. प्राचार्य, महिला अभियांत्रिकी महाविद्यालय, कात्रज–धनकवडी, पुणे ४३, यांना,

पावती लिहून देणार सौ./श्री. Dr. V. K. Bairagi   पत्ता AISSMS IOIT

खाते
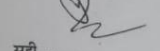
दिनांक 10/09/2025

तपशील	रुपये	पैसे
Avishkar - 2025 honororium as a expert for judging E&TC, IT, Comp. Engg. Projects	1000	00
एकूण अक्षरी रुपये One thousand rupees only फक्त	1000	00

वरील तपशीलाप्रमाणे रक्कम रोख / चेकने मिळाली, आभारी आहोत. चेक नंबर _____ बँक

प्राचार्य   अकौंटंट   सही ....

Receipt 2

भारती विद्यापीठाचे
महिला अभियांत्रिकी महाविद्यालय
कात्रज–धनकवडी, पुणे – ४११ ०४३.

पावती नंबर

खर्चाची पावती

मा. प्राचार्य, महिला अभियांत्रिकी महाविद्यालय, कात्रज–धनकवडी, पुणे ४३, यांना,

पावती लिहून देणार सौ./श्री. Mr. Ketan Dhivekar   पत्ता Geminus Tech Pvt. Ltd., Pune.
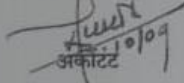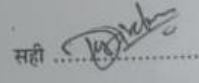
खाते

दिनांक 10/9/2025

तपशील	रुपये	पैसे
Avishkar - 2025 honororium as an expert for judging IT, Comp. Eng. Projects	1000	00
एकूण अक्षरी रुपये One thousand rupees only/- फक्त	1000	00

वरील तपशीलाप्रमाणे रक्कम रोख / चेकने मिळाली, आभारी आहोत. चेक नंबर _____ बँक

प्राचार्य   अकौंटंट   सही ....

Summary

The **College Level Avishkar Project Competition** is organized by Bharati Vidyapeeth's college of Engineering for Women, Pune on 10th September 2025 to encourage students to engage in research-oriented activities and showcase innovative ideas. Total 12 groups were participated in this project completion out of it 12 groups , 04 groups are selected for Zonal level project competition. The event provides a platform for participants from various disciplines to present their projects through models, prototypes, or research findings. It helps students apply theoretical knowledge to practical problems, develop problem-solving and presentation skills, and work on socially relevant issues. Guided by faculty mentors, students gain valuable exposure, recognition, and motivation to pursue higher-level competitions at the university and state levels. Overall, the competition promotes creativity, teamwork, and a research culture within the institution, making it a stepping stone toward innovation and entrepreneurship.

: Founder :
Dr. Patangrao Kadam
M.A., LL.B., Ph.D.

Principal :
Prof. (Dr.) Pradeep V. Jadhav
M.E., Ph.D.(Mech. Engg.), FMASC, FLMSIET, MSAEINDIA

Ref. No. : BV / COEW / 564 /2024-25

Date : 02/10/2024

To,

Avishkar Planning Committee,

Internal Quality Assurance Cell,

Savitribai Phule Pune University,

Pune-411007

Subject: Report of College Level Avishkar-2024 Competition.

Dear Sir,

Season's Greetings!

Thank you for giving us the opportunity to participate in Avishkar-2024 Competition.

As per the instructions our institute has organized College Level Avishkar-2024 Competition. 6 groups are shortlisted as per the criteria prescribed by you.
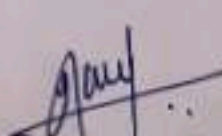
The list selected project list is Attached herewith.

Thanking You.

Prof. Dr. Vijaya R. Pawar

ARC

**Academic & Research
Coordinator (ARC)
BVCOEW, Pune-43.**

Prof. Dr. Pradeep V. Jadhav,

Principal

PRINCIPAL
Bharati Vidyapeeth's
College of Engineering for Women
Pune-Satara Road, Pune-411043.

Index

Sr. No.	Particulars
1	List of the selected Projects
2	Abstract/Posters
3	Audio Clip
4	Evaluation Sheet
5	Invitation Letters/ Gratitude Letters
6	Honorarium
7	Summary
8	Geo Tagged Photographs

Bharati Vidyapeeth's College of Engineering for Women, Pune-43

List of the selected Projects at UG level

Sr. No.	Category	Level	Title of the paper
1	Engineering And Technology	UG	Agricultural Crop Recommendation System for Farmers based on the soil type using machine learning techniques
2			Mental Health Analysis
3			Indigenous Farming Robot
4			I-FAMS : India Food Analysis and Mapping System
5			NutriElla: Information Technology
			Secure-Net: A comprehensive Cyber-Defence Toolkit

ARC

Prof. Dr. Vijaya R. Pawar

Academic & Research
Coordinator (ARC)
BVCOEW, Pune-43

Reg. No.
740-69-009
(NDEG-APR)
ET/2000
Pune-43

Principal

Prof. Dr. Pradeep V. Jadhav,
PRINCIPAL
Bharati Vidyapeeth's
College of Engineering for Women
Pune-Satara Road, Pune-411043.

AGRICULTURAL CROP RECOMMENDATION SYSTEM FOR FARMERS BASED ON THE SOIL TYPE USING MACHINE LEARNING TECHNIQUES

Abstract

In today's time technology is playing a vital role in different sectors to overcome the difficulties and to have better and maximum results. In India, the farming sector has a huge impact on Indian economy. Half of the country's population is still employed in the agriculture sector. Agriculture industry is largely influenced by natural conditions of its surroundings and hence faces a number of challenges in actual farming practices. Agriculture practices in the country are largely primitive and technological change in the sector is slow. Effective technology can be used to increase the yield and to reduce the maximum possible challenges in this field. Most of the times it is observed that farmers tend to sow the crop according to its market value and possible financial profits rather than taking factors like soil conditions, sustainability etc. in to the account. This may lead to undesirable results for farmers and for the nature of soil too. In today's time, technologies like machine learning and deep learning can become game changers in such fields if they are used in a proper manner. This paper will represent an effective use of such technologies in order to provide maximum assistance to farmers in the area of crop recommendation.

AGRICULTURAL CROP RECOMMENDATION SYSTEM FOR FARMERS BASED ON THE SOIL TYPE USING MACHINE LEARNING TECHNIQUES

INTRODUCTION

In the realm of developing technologies, successful information sharing can empower agriculture to realize and develop its full potential. Conversely, farmers often struggle to choose the best-suited crops for their land due to reliance on traditional and non-scientific methods. Based on soil content factors such as pH, nitrogen, phosphorus, temperature, and humidity, we need to recommend suitable crops.

LITERATURE SURVEY

Sr no.	Publication Details	Seed Idea	Drawbacks
1.	G. Mariammal et al. "Prediction of Land Suitability for Crop Cultivation Based on Soil and Environmental Characteristics Using Modified Recursive Feature Elimination Technique With Various Classifiers" IEEE	This work proposes a novel feature selection approach called modified recursive feature elimination (MRFE) to select appropriate features from a data set for crop prediction.	MRFE method will give less accuracy on large dataset.
2.	S.R.Rajeswari , Parth Khuneta, et al. "Smart Farming Prediction Using Machine Learning" IJTEE	These paper mainly focus on the algorithms such as SVM used to predict crop yield ,crop cost prediction.	Requires important features for classification.

OBJECTIVES

- To collect the data in the form of images and csv formats.
- To initialize data and train the model.
- To recommend the crops.
- To improve the performance of model.
- To detect the soil type.

PROBLEM STATEMENT

To detect and identify the most suitable crops for the lands due to varying soil conditions, climate factors and market Demands.

METHODOLOGY

Data Collection
- Gather images of crops.
- Compile a CSV dataset containing features like Nitrogen,pH,Phosphorus,potassium,Temperature,Humidity.

Model Training
- Train the model using the training set, adjusting parameters and using techniques like cross-validation to optimize performance.
- Choose appropriate algorithms (e.g., Random Forest, Neural Networks) based on the data type.

Data Preprocessing
- Clean and preprocess the CSV data (handle missing values,normalize features).
- Label the images using annotation tools to categorize them by crop,growth stage, and conditions.
- We are going to resize the image in 24 X 24 dimension.

Data Splitting
- Divide the dataset into training, validation, and test sets.

Crops Recommendation
- Implement a recommendation system that uses the trained model to suggest crops based on new input data.

BLOCK DIAGRAM
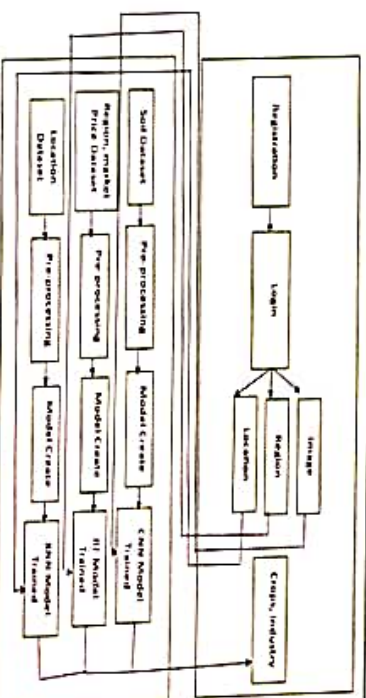
RESULTS EXPECTED OUTPUT

Input Values		Output Values	
Parameters	**Values**	**Parameters**	**Values**
Region	Kokan	Predicted Soil Type	Alluvial Image
Season	Kharip	Predicted Crops	Cannabis pods,flower
pH	44	Predicted Humidity	81.66866555
Nitrogen	44.0	Predicted Temperature	23.51894420
Phosphorous	44.0	Predicted	5000004
Pottasium	44.0	Predicted Rainfall	212.1853273 6999995

FUTURE SCOPE

Real-time Monitoring & Updates: Incorporate IoT devices for real-time monitoring of soil health, weather conditions, and crop growth, providing dynamic recommendations.

Farmer Education & Training: Develop a mobile app or chatbot to train farmers on sustainable farming practices, using the system's insights to enhance decision-making.

ABSTRACT

This project aims to develop an AI-based system for remote mental health assessment that uses text and video inputs. Patients will connect with counsellors via real time communication and data will be captured for analysis. Text inputs will be processed using NLP while video inputs will be processed through YOLOv9 and further analysis through facial recognition. Machine Learning models are trained on conditions like depression, anxiety, trauma, and other psychological issues to predict mental health issues and generate comprehensive reports. The solution is designed to enhance accessibility to mental health support and provide a scalable option for professionals.

Mental Health Analysis

Problem Statement: The underdiagnosis of mental health disorders due to limited access to traditional in-person consultations highlights the need for a remote, AI-driven solution that can analyze patient-provider interactions and accurately predict mental health conditions.

Objectives:

1. To create a platform for remote patient-provider communication (text, video).
2. To use AI to analyze interactions and assess mental health conditions.
3. To build models for early detection of mental health issues.
4. To improve diagnosis accuracy with multi-modal data (text, video).
5. To offer AI-driven reports to support provider decisions.

Statistics:
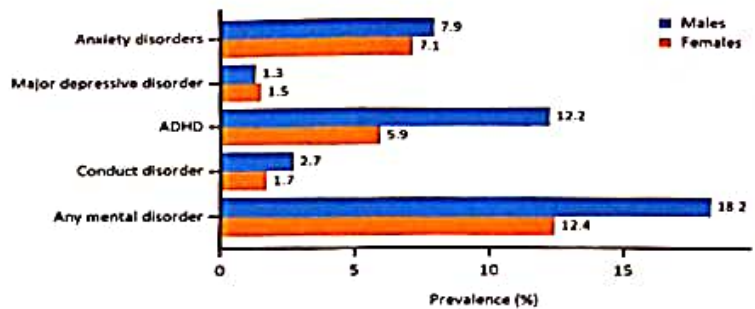
Figure 2 : Prevalence of mental disorders in students in Years 1-6, by disorder and sex

System Architecture:
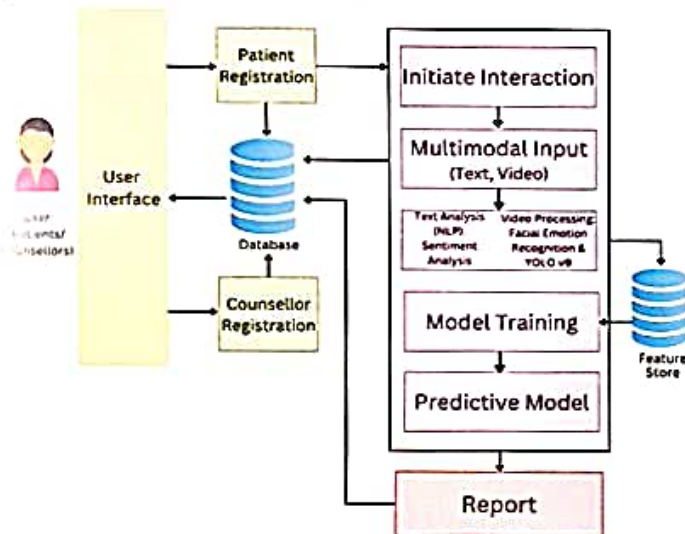
Figure 1 : System architecture

Societal Benefit:

Figure 3 : Societal Benefits

Methodology:
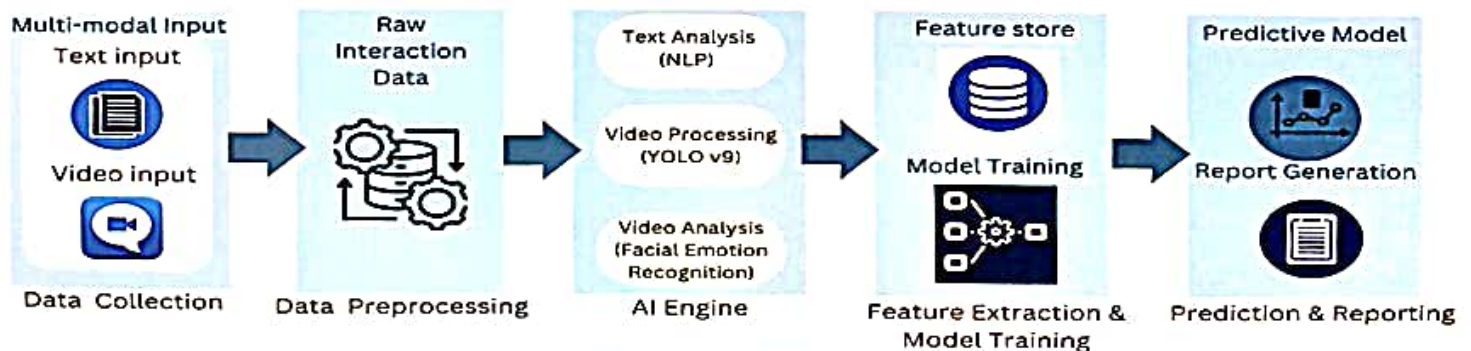
Figure 4 : Proposed Methodology

Conclusion: This project plans to create a remote mental health platform that provides accessible mental health support. It uses AI algorithms and data analysis to provide reports that will give appropriate diagnosis.

INDIGENOUS FARMING ROBOT
ABSTRACT

Agriculture plays a crucial role in sustaining human life, yet it faces numerous challenges such as labor shortages, rising operational costs, and inefficient resource management. In response to these challenges, this project presents an innovative solution through the design and development of a multipurpose farming robot, integrated with automation and IoT technologies.

This project introduces a versatile farming robot designed to automate and optimize agricultural tasks. Controlled remotely via a smartphone application, the robot incorporates features such as seed planting, fogging and weeding mechanisms. By leveraging IoT technology, farmers can enhance productivity, reduce labor costs, and ensure precise control over their operations, ultimately contributing to sustainable and efficient agriculture.

In conclusion, this project offers a transformative approach to modern agriculture by introducing a multipurpose farming robot that leverages automation and IoT technologies. By automating key tasks such as seed planting, weeding, and fogging, the robot enhances productivity, reduces labor dependency, and ensures more efficient resource use. This innovation not only addresses critical challenges in agriculture but also promotes sustainable practices, paving the way for more resilient and technology-driven farming solutions.

INDIGENOUS FARMING ROBOT

PROBLEM STATEMENT:

To develop an IoT-enabled farming robot using esp 32 for automating seeding, weeding, and fogging, enhancing efficiency and reducing labor costs.

INTRODUCTION:

An indigenous farming robot that automates seeding, weeding, and fogging using IoT technology and a smartphone app. By improving efficiency and reducing labor costs, it addresses key challenges in agriculture and enhances crop yields. Additionally, the robot's real-time monitoring capabilities provide valuable insights, allowing farmers to make data-driven decisions for sustainable farming practices. This innovative solution aims to revolutionize traditional farming methods and contribute to increased productivity in the agricultural sector.

ADVANTAGES:

1. Increased efficiency.
2. Automated Data Collection.
3. Remote Diagnostics and Maintenance.

FUTURE SCOPE:

1. Crop Health Monitoring.
2. Automated Data Collection.
3. Remote Diagnostics and Maintenance.
4. Modular Design

Literature Survey:

Sr. no.	Author (Year)	Technology used	Advantages	LIMITATIONS
1	Ranjtha B, Nikhitha M, N Aruna K, Afreen (2019)	The functions like grass cutting, sowing, and the spraying controlled using Bluetooth	1. Easy to use 2. Low cost 3. User Friendly	1. Limited range 2. Low power backup 3. Low security, anyone can access
2	K Durga Sowjanya, R Sandhu, M Parjullam, K Srikanth, P Bhargav. (2017)	Bluetooth technology Based to control the mud leveling and the seeding	1. Compact size 2. Low current consumption 3. Easy user interface	1. Limited range 2. Time consuming as small size

OBJECTIVES:

1. To automate weeding, seeding and fogging tasks.
2. To enable dual control via Blynk app and RF remote.
3. To monitor real-time soil and crop data.
4. To create a user-friendly interface for easy operation.
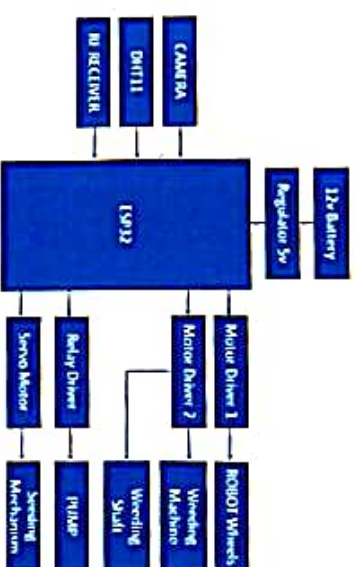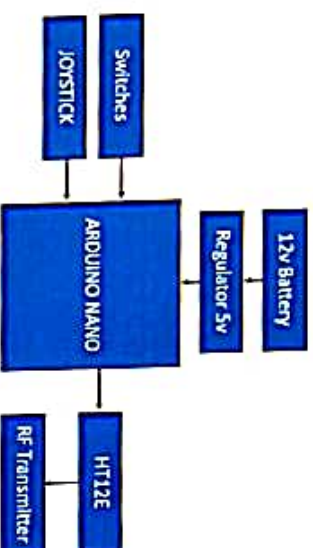
Expected Result:

Increased efficiency in agricultural operations, resulting in reduced labor costs and improved crop yields. Enhanced decision-making through real-time data monitoring, leading to optimized resource usage and sustainable farming practices.

REFERANCES:

1. B. Ranjitha, M. N. Nikhitha, K. Aruna, Afreen and B. T. V. Murthy, "Solar Powered Autonomous Multipurpose Agricultural Robot Using Bluetooth/Android App," 2019 3rd International conference on Electronics, Communication and Aerospace Technology (ICECA), Coimbatore, India, 2019, pp. 872-877
2. J. Ahmed B.K., A. Prakash, S. Ilusna M. and A. Prakash, "An Approach for Digital Farming using Mobile Robot," 2020 Second International Conference on Inventive Research in Computing Applications (ICIRCA), Coimbatore, India, 2020

Title:

I-FAMS: India Flood Analysis and Mapping System

Abstract:

Floods are a major problem worldwide, causing a lot of damage to buildings, nature, and people's lives. Right now, the ways we deal with floods often looks at one factor at a time. This makes it hard to predict floods accurately and plan how to reduce their impact. Current methods usually focus on just one or two things, like how much rain falls or past flood events, without considering how everything works together.

To fix this, we've created a new system called the Integrated Flood Analysis and Management System (I-FAMS). This system brings together all the important information about floods in one place. It looks at how far floods spread, how deep the water gets, how people use the land, how long flood water stays in an area, and how much rain falls. I-FAMS uses pictures from satellites, smart computer programs, and advanced ways of handling data to give a complete picture of how floods happen and what they do.

Our new system can help in many ways. It can show which areas are most likely to flood, helping local leaders make better plans to protect people and property. It helps city planners decide where it's safe to build and how to make buildings that can better withstand floods. The system also helps emergency workers, government agencies, and community groups work together better during a flood. It provides valuable information about water resources, which is important for managing water supplies and protecting the environment. Lastly, I-FAMS gives policymakers the information they need to make good decisions about flood protection, and it helps teach communities about flood risks and how to prepare for them.

By looking at all aspects of floods together, I-FAMS represents a big step forward in how we handle flood risks. It has the potential to greatly improve how we assess flood risks, plan our cities, and manage disasters. In the long run, this could help create safer and more resilient communities in areas where floods are common.

India Flood Analysis and Mapping System

I-FAMS

Introduction:

Floods are destructive natural disasters that impact the environment, economy, and lives, with climate change increasing their frequency and intensity. Predicting vulnerable areas requires analyzing river basin characteristics, water depth, rainfall, and historical data. The India Flood Analysis and Mapping System (IFAMS) provides a streamlined platform for flood data analysis, enabling policymakers to make informed decisions. These events harm not only the immediate region but also the surrounding areas through overflow, underscoring the need for a comprehensive flood risk assessment system. Studying past floods is vital for improving predictions and implementing effective preventive measures to reduce damage.

Objective:

| Historical Data Utilization: Use past flood events to identify vulnerable areas and predict future flood likelihood and severity. | Flood Risk Assessment: Develop a system to analyze key factors like river basins, water depth, rainfall, land cover. | Downstream Impact Analysis: Assess the effects of flooding on downstream areas impacted by flood data by overflow from rivers and water bodies. | Integrated Data Platform: Create a centralized platform for efficient access and analysis of flood data by scientists for better response. |

Problem Statement:

Flood Monitoring and Impact analysis system - I-FAMS (India Flood Analysis and Mapping System)

Methodology:

Flood Extent

Flood Depth

LULC

Flood Age

Precipitation
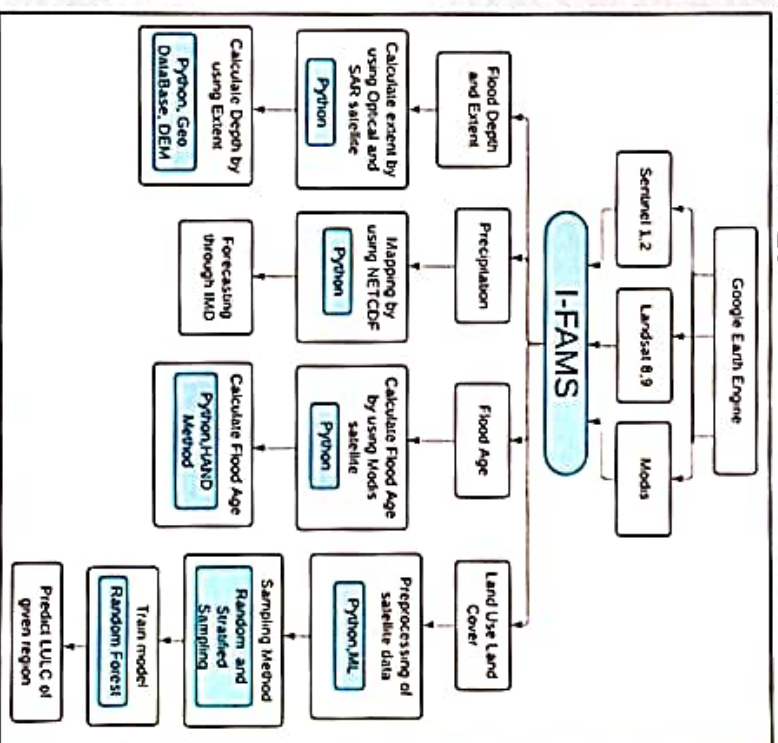
Results:

A web application that gives-
- Streamlined Access: Simplifies data access for flood analysis.
- Centralized Data: Consolidates key flood information for the Brahmani-Baitarani basin.
- Quick Insights: Enables efficient data input and tailored flood risk insights.
- Foster Collaboration: Enhances expert collaboration and knowledge sharing.
- Informed Decisions: Empowers stakeholders for better flood preparedness.

Future Scope:

- Water Delineation: The water delineation tool will enable visualization of India's water stream networks, enhancing analysis of river flows and flood risk assessments.
- 3-D Modeling: 3D modeling will visualize historical changes in river systems, aiding in water resource management & flood risk mitigation.

Applications:

- Flood Risk Assessment
- Water Monitoring
- Urban Planning
- Policy Development
- Disaster Coordination
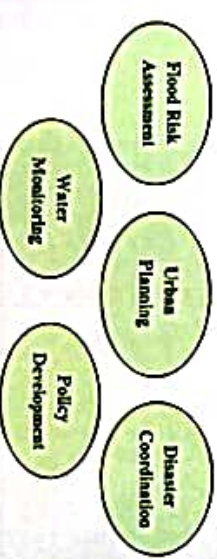
References:

- Zeeshan Zafar, Muhammad Zubair, Yuanyuan Zhu, Shah Fahd, Adeel Ahmad Nadeem Performance assessment of machine learning algorithms for mapping of land use/land cover using remote sensing data
- Peter, B.G.; Cohen, S.; Lacey, R.; Mamalinghe, D.; Rasey, A.; Brakenridge, G.R. Google Earth Eagle Implementation of the Floodwater Depth Estimation Tool (FwDET-GEE) for Rapid and Large Scale Flood Analysis. IEEE Geosci. Remote Sens. Lett. 2022, 19, 1-5.

NUTRIELLA

Abstract: The proposed app offers a personalized approach to women's menstrual health by integrating Ayurvedic remedies with modern technology. Users input their cycle data, symptoms, and age to receive tailored Ayurvedic dietary suggestions for each phase, promoting natural, side-effect-free healing. A decision tree algorithm classifies symptoms based on severity: mild or moderate symptoms receive Ayurvedic remedies, while severe cases prompt users to consult a gynecologist, ensuring both holistic care and medical safety. Natural Language Processing (NLP) interprets user inputs in real-time, allowing the app to understand symptoms and respond with appropriate remedies. By combining ancient Ayurvedic principles with cutting-edge AI technologies, the app empowers women to manage their menstrual health holistically, while offering early detection of potential health risks. Through a combination of cycle tracking, symptom-specific guidance, and continuous learning, the proposed app provides a comprehensive and personalized solution for improved menstrual health management and informed decision-making.

NutriElla

Information Technology

Problem Statement:

To develop a Personalized Ayurvedic Remedies and Nutritional Guidance Application for Women's Menstrual Health using Machine Learning Algorithms.

Methodology:

- Data Collection & Preprocessing: Collecting the Real time data and processing it through online survey at the initial phase.
- NLP: To understand the user message and according to it generate response.
- Decision Tree: To classify symptoms on the basis of their severity. It provides faster performance
- Rule-Based Algorithm: To recommend Ayurvedic remedies for mild to moderate menstrual symptoms. For severe symptoms, it advises consulting a gynecologist to ensure proper medical care.

Objectives:

- To study and compare existing reports and papers to gain insights into natural remedies for managing menstrual symptoms.
- To conduct survey among different aged women so as to collect their Menstrual Health data.
- To classify the symptoms on the basis of their severity.
- To recommend natural remedies using Rule-Based algorithm.

Social Benefits:

- Many apps only provide menses tracking, whereas we provides ayurvedic guidance to deal with their symptoms.
- Our app provides a friendly and personal platform to women who hesitate to visit gynecologist and talk about their issues.

System Architecture:
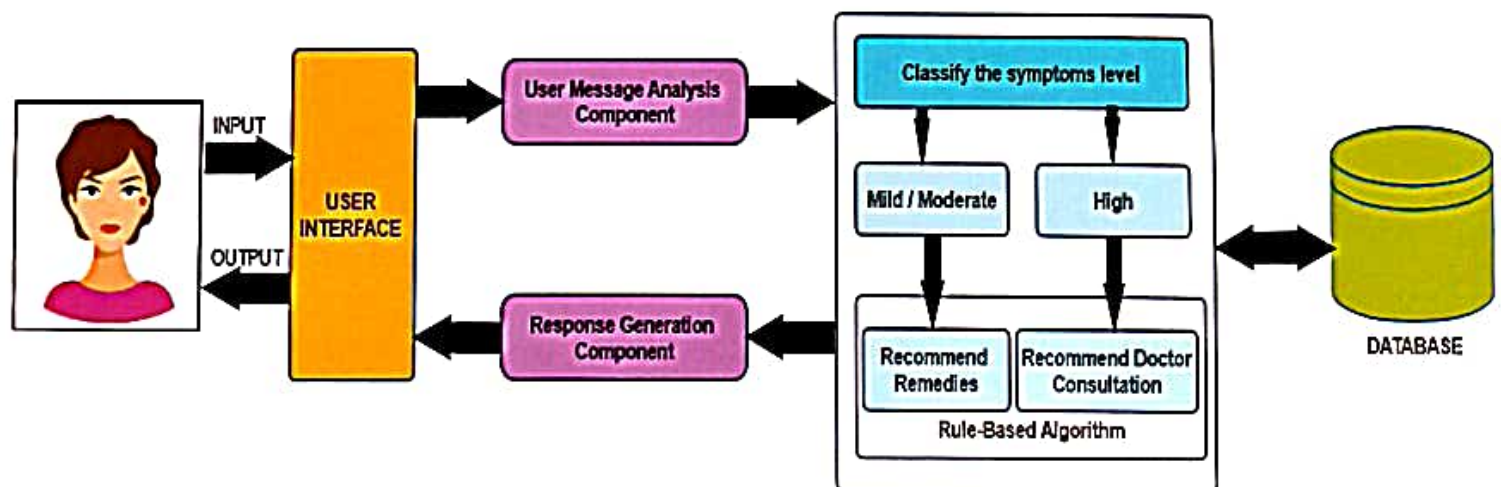
Conclusion: Tailored to individual needs and age groups, it offers holistic solutions for a more comfortable and vibrant life. Say goodbye to menstrual woes and embrace the power of Ayurveda.

1

SecureNet: A Comprehensive CyberDefence Toolkit

ABSTRACT

In an era where cyber threats pose significant threats to people, often leaving them vulnerable due to a lack of technical expertise, 'SecureNet: A Comprehensive CyberDefense Toolkit' emerges as an intuitive, user-friendly solution designed for all users, including those without technical knowledge. This innovative toolkit automates critical security tasks to enhance web and system security while simplifying the process of managing cybersecurity, thus empowering users to take charge of their digital safety. SecureNet offers a diverse range of essential functionalities, including web vulnerability scanning, system scanning, password strength analysis, keylogging detection, file integrity verification, and detailed system logging with anomaly detection. The web vulnerability scanner is capable of detecting common website vulnerabilities, enabling users to identify and address potential security flaws proactively. This proactive approach is crucial in preventing cyber-attacks before they can cause harm. The system scanning feature identifies the operating system, scans open ports, matches against known vulnerabilities, and assesses overall risk. This comprehensive assessment provides users with a clear picture of their security posture, allowing for informed decision-making regarding necessary improvements. To address the critical issue of password security, SecureNet implements a robust password strength analyzer and a user-friendly password manager. These tools empower users to create, manage, and store strong passwords effectively, thus mitigating the risks associated with weak or reused passwords, which are common vulnerabilities that can lead to unauthorized access and data breaches. Moreover, SecureNet enhances its security capabilities through the correlation of logs, keystrokes, and magic numbers, facilitating easier anomaly detection and faster incident response. By maintaining detailed logs of all activities within the system, the toolkit enables users to correlate potential malware actions with specific system malfunctions. This significantly improves the ability to investigate and respond to security incidents promptly and efficiently, ensuring that users are equipped to act on suspicious behaviors. Thus, SecureNet provides a scalable and efficient solution to modern cybersecurity challenges. It enhances security awareness and enables proactive defense against emerging threats, making cybersecurity accessible to all. With SecureNet, users are equipped with the necessary tools to navigate the complexities of today's digital landscape while fortifying their defenses against potential cyber threats.

SECURENET:
A COMPREHENSIVE CYBER DEFENSE TOOLKIT

INTRODUCTION

SecureNet: A Comprehensive Cyber Defense Toolkit offers an intuitive, automated solution to address the growing risks posed by cybersecurity threats to individuals and organizations. Many users, lacking technical expertise, are vulnerable to attacks, making accessible tools essential for enhancing security awareness. SecureNet simplifies web and system vulnerability scanning, password management, and activity logging, empowering users to proactively defend against emerging threats.

PROBLEM STATEMENT

In today's interconnected world, the growing complexity of cyber threats makes it challenging for individuals and organizations to protect their systems. Common vulnerabilities like SQL injection and weak passwords leave them exposed. While advanced security tools exist, they are often too complex for non-experts. This project simplifies cybersecurity by offering intuitive tools for vulnerability scanning and password management. Utilizing techniques like log correlation, keystroke analysis, and file integrity checks, it enhances anomaly detection and response, empowering users to defend their systems effectively.

OBJECTIVES

The SecureNet project provides users of all backgrounds with a comprehensive cybersecurity toolkit for securing their systems and digital environments. It includes a web vulnerability scanner, system scanning to identify the OS, scan ports, and assess risks, along with a password strength analyzer and user-friendly password manager. Additionally, it correlates logs, keystrokes, and magic numbers for anomaly detection and faster incident response, while ensuring file integrity using blockchain technology, Merkle roots, and magic numbers.
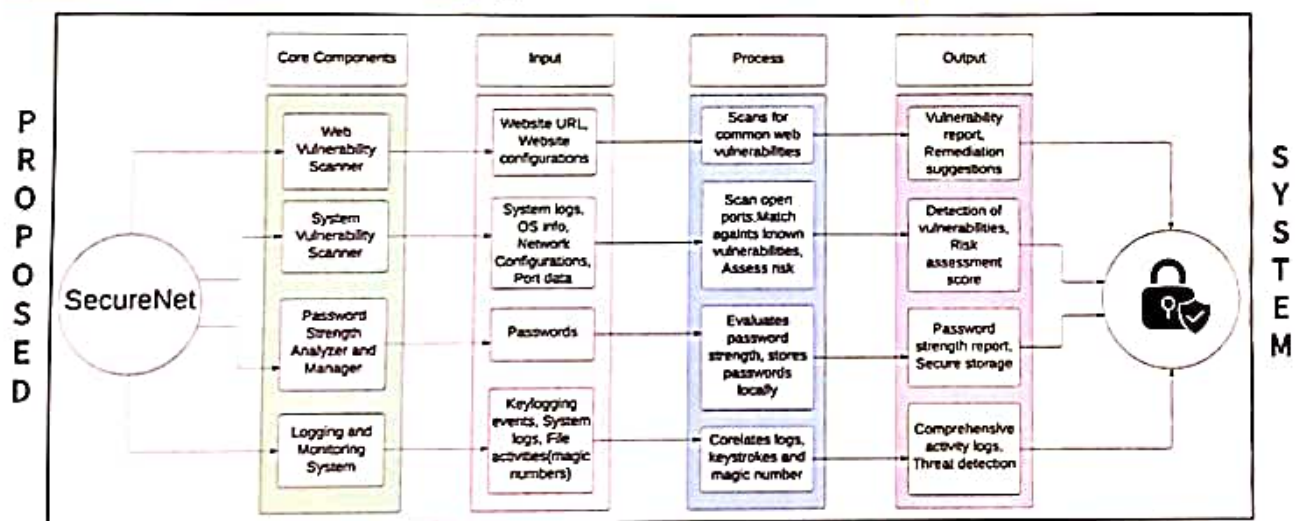
METHODOLOGY

The SecureNet project employs heuristic algorithms for vulnerability detection, Markov Chains for password prediction, SHA-256 or bcrypt for hashing, and machine learning (K-means, Random Forest) for anomaly detection. Regular expressions and fuzzing uncover web vulnerabilities, CVSS assesses scan risks, and decision trees with weighted scoring prioritize remediation.

EXPECTED OUTCOMES

The SecureNet project aims to deliver a comprehensive, accessible cybersecurity toolkit for users of all skill levels. It will identify vulnerabilities, offer secure password management, and enhance anomaly detection by correlating logs and keystrokes. SecureNet will also ensure data integrity through blockchain and Merkle roots, providing a robust defense against modern cyber threats.

CONCLUSION

In conclusion, SecureNet aims to bridge the cybersecurity awareness gap by providing an accessible toolkit with vulnerability scanning, password management, anomaly detection, and blockchain-based file integrity. It empowers users to proactively protect their digital environments against evolving threats.

Pune, Maharashtra, India
1, Bharati Vidyapeeth Campus, Dhankawadi, Pune, Maharashtra 411043, India
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Long 73.85493°
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GPS Map Camera

भारती विद्यापीठाचे

महिला अभियांत्रिकी महाविद्यालय

कात्रज-धनकवडी, पुणे – ४११०४३.

__खर्चाची पावती__

मा. प्राचार्य, महिला अभियांत्रिकी महाविद्यालय, कात्रज-धनकवडी, पुणे ४३, यांना,

पावती लिहून देणार सौ./श्री. __Dr. P. N. Raikar__ पत्ता __SKN COE Pune__

दिनांक __24/09 / २०२४__

खाते _____

तपशील	रुपये	पैसे
Avishkar - 2024 College level Project Competition Judge for reviewing the Project.	1000/-	
एकूण अक्षरी रुपये __One Thousand only__	1000/-	

वरील नमुन्यायाप्रमाणे रक्कम रोख / चेक/ने मिळाली, आमची आहेत. चेक नंबर _____ बँक _____

प्राचार्य

अकौंटंट

सही

: Founder :

M.A., LL.B., Ph.D

Principal :

M.E., Ph.D (Mech. Engg.), FMASC, FLMIIET, MSAEINDIA

COLLEGE OF ENGINEERING FOR WOMEN

(Recognised by AICTE New Delhi, DTE Mumbai & Affiliated to Savitribai Phule Pune University)

• ID No. PU/PN/Engg 150/2000 • DTE College Code: EN6285

Ref No. : BV/CCEW/ 486 /2024-25

Date : 25/09/2024

To,

Prof. Dr. P. N. Railkar,

Assistant Professor,

Computer Engineering Dept.

SKNCOE, Pune.

Subject: Expression of Gratitude

Dear Madam,

We sincerely wish to thank you for accepting our invitation as a Judge for College level –Avishkar-2024, project competition organised at Bharati Vidyapeeth's College of Engineering for Women, Pune.

Your guidance will undoubtedly enhance the students' performance during the event.

Thank you for sparing your valuable time and look forward for the same favourable support in future.

Thanking you,

Prof. Dr. V. R. Pawar

ARC

Prof. Dr. Pradeep V. Jadhav
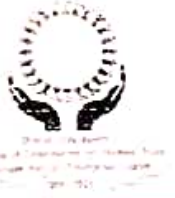
Principal

Ref. No : BV / COEW / 485 / 2026-25

Date : 23/09/2024

To,

Prof. Dr. P. N. Railkar,

Assistant Professor,

Computer Engineering Dept.

SKNCOE, Pune.

Subject: Invitation as a Judge for College level –Avishkar-2024, project competition organised at Bharati Vidyapeeth's College of Engineering for Women, Pune

Dear Madam,

It is our immense pleasure to invite you as a Judge for College level –Avishkar-2024, project competition organised at Bharati Vidyapeeth's College of Engineering for Women, Pune on Wednesday, **25th September 2024 from 11.00 AM to 2.30 PM.**

Your experience and expertise will help our students to enhance the performance.

It's our humble request to spare time as a judge.

Thanking you,

Prof. Dr. V. R. Pawar

ARC

Prof. Dr. Pradeep V. Jadhav

Principal

पावती नंबर

भारती विद्यापीठाचे
महिला अभियांत्रिकी महाविद्यालय

काञ्ज-धनकवडी, पुणे – ४११ ०४३.

खर्चाची पावती

मा. प्राचार्य, महिला अभियांत्रिकी महाविद्यालय, काञ्ज-धनकवडी, पुणे ४३, यांना,

पावती लिहून देणार श्री./श्री. ___ Dr. V.E. Bairagi ___ पत्ता ___ ASSM's IOIT, Pune

दिनांक 24/07/2024

खाते _____

तपशील		रुपये	, पैसे
Avishkar - 2024 college level Project competition Judge for reviewing the project.		1000	

एकूण अक्षरी रुपये *one Thousand only* फक्त | 1000

वरील तपशीलाप्रमाणे रक्कम रोख / चेकने मिळाली, आभारी आहोत. चेक नंबर ___ बँक ___

प्राचार्य

अकौंटंट

सही ....v.t.Bairagi....

Avishkar 2024

Poster number	Name of Student	Title of project	Sign
1	Avhad Chaitali	Real Time Crime Detection using Deep Learning CNN Algorithm	C.A.Avhad
	Bagwan Saniya		
	Shaikh Alnaaz		Alnaaz
	Shelke Nikita		She
2	Shruti Deshmukh	Mental Health Analysis	
	Svarupa Kadam		
	Pudale Manasvi		Pudle
	Waghmare Shruti		
3	Shriya Lakhe	NutriElla- Nutritional guidance and consulting based on menses	Shriya
	Srushti Mule		Mule
	Megha Salunke		
	Vaishnavi Waykaskar		V.Kaskar
4	Chaitali Nigade	Safeguarding Society: A DeepFake Video Detection Framework	
	shreya sakare		
	shruti sakare		Sakare

	mayuri salunkhe		
5	Tanvi Deore	SecureNet: A Comprehensive Cyber Defense ToolKit	
	Riya Kadole		
	Mitali Rajesh Chavan		
	Saba Aslam Sayyad		
6	Apurva Gadilkar	IFAMS: India Flood Analysis and Mapping System	
	Sae Jamdade		
	Namrata Rathi		
	Chahal Ohri		

Kamalgi

(Dr. Ketaki Amit Malgi)

Avishkar 2024

Sr No	Poster No.	Relevance (20 Marks)	Methodology opted (20 Marks)	Contribution (20 Marks)	Innovativeness (20 Marks)	Outcome (20 Marks))	Total (100 Marks)
1	1	18	15	15	18	5	71
2	2	15	12	12	12	5	56
3	3	12	12	10	12	5	51
4	4	12	12	10	10	4	48
5	5	12	12	12	12	4	52
6	6	12	12	10	10	3	47
7	7	18	12	12	18	5	65

VKBairagi
25/09/2024

Avishkar 2024

Poster number	Name of Student	Title of project	Sign
1	Pratiksha Kanthe	Multipurpose farming robot using IoT.	
	Neha Kale		
	Pranoti Kakade		
2	Pridil Sonje	Agriculture Crop Recommendation System by using Machine learning.	
	Gayatri Patve		
3	Nikita Wadghule	Accident Avoiding System.	
	Ananya Wagh		
	Snehal Shinde		
4	Mansha Joshi	Implementation of Intelligent and Resilient security box to defend against insider attacks on Cyber- Physical Systems.	
	Disha Kabra		
	Kanan Agrawal		
5	Ambekar Priyanka	Advanced Object Detection and Gripper design for Robotic pick and place systems.	
	Rutuja Apte		
	Apurva Dhandgavhal		
6	Anushruti Adhikari	Automated Face sketching and	

	Diti Jariwala	identification with GANs for Forensic investigation	
	Jagruti Patil		
	Arya Nigade		
7	Malishka Shelke	PastPath : Virtual expeditions	
	Siddhi Udamale		
	Neha Jadhav		
	Sanskruti Pati		

Bharati Vidyapeeth's College of Engineering for Women, Pune-43

College Level Avishkar-2024

Evaluation Form

Name Of the Department: - Information Technology

Date :- 25/09/2024

Sr. No.	Title of the Project	Relevance 20M	Methodology adopted 20M	Contribution 20M	Innovativeness 20M	Outcome 20M	Total 100M
1	Real Time Crime Detection using Deep Learning CNN Algorithm	12	12	10	12	12	58
2	Mental Health Analysis	14	14	14	14	14	70
3	NutriElla- Nutritional guidance and consulting based on menses	15	15	15	15	15	75
4	Safeguarding Society: A DeepFake Video Detection Framework	13	13	13	13	13	65
5	SecureNet: A Comprehensive Cyber Defense ToolKit	16	18	16	16	16	82
6	IFAMS: India Flood Analysis and Mapping System	15	15	17	15	15	77

Name of the Expert and Sign   Dr. Poonam N. Railkar

Bharati Vidyapeeth's College of Engineering for Women, Pune-43

Report on

Avishkar -2024,- The College level Avishkar Competition

Avishkar -2024, College level Avishkar Competition was organized at Bharati Vidyapeeth's College of Engineering for Women, Pune on 25 th September 2024. Total 13 UG category projects were participated in the competition from all the departments. Six projects were selected from UG category.

Prof. Dr. Vinayak M. Bairagi, Prof. Dr. Dr. Railkar were as a judge to review the poster. The review was blind review. As per the evaluation criteria 6 Projects were selected as a Winner Projects at College Level.

The winner were declared in the program chaired by Mr. Kabir Gaikwad, Head Altal Copco Ltd. And Prof. Utturkar, Principal, Bharati Vidyapeeth's Jawaharla Nehru Institute of Technology, Pune.

Principal Prof. Dr. Pradeep V. Jadhav addressed the students. Dr. V.R. Pawar- ARC, Congratulated the students. Dr. S.ADhole, Dr. S.P.Kadam ,Dr. K.A. Malgi, Departmental Coordinators were present among the attendies.

Ref. No. : BV / COEW / 568 / 2023-24

Date : 03/10/2023

Director,

IQAC Cell, Savitribai Phule Pune University

Ganeshkhind, Pune,

Maharashtra 411007

Sub:- College level Avishkar-2023 conduction.

Dear Sir,

Thank you for giving the opportunity to conduct College level Avishkar-2023.

As per the directions given we are herewith submitting the report of College level

Avishkar-2023.

ARC

I/C PRINCIPAL
Bharati Vidyapeeth's
College of Engineering for Women
Pune-Satara Road, Pune-411043.

Attachments:-

1. List of the participants

2. Two Geo-tagged Photographs

3. One Video Clip

4. A3 size poster

5 Abstract

Bharati Vidyapeeth's College of Engineering for Women, Pune

Index

- Cover Page
- List of the selected Projects
- Invitation Letters to the experts
- Gratitude Letters to the experts
- Honorarium to the experts
- Certificates
- Event Report
- GEO Tagged Photographs

Bharati Vidyapeeth's College of Engineering for Women, Pune-43

College Level Avishkar -2023

List of selected Candidates

Sr. No.	Category	Title of the Project	Level
1		Machine Learning based water Consumption prediction and sustainable water allocation	UG
2	Engineering & Technology	BP Measurement using Machine Learning	UG
3		EEG Report analysis and anomaly detection using Machine Learning	UG
4		Real time weather monitoring information system	UG
5		Robotics framework for IT recruitments	UG
6		AI clarion food/Product safety using OCR	UG

Bharati Vidyapeeth's College of Engineering for Women, Pune-43

College Level Avishkar -2023

List of selected Candidates

Sr.No.	Name of Students	Final Selected Topic	Email id of the students/faculty member
1	Vaibhavi Jarande Ishwari Jadhav Vaishali Deshmukh	Machine Learning based water Consumption prediction and sustainable water allocation	vijaya.kashid@bharatividyapeeth.edu
2	Saee Kad Rutuja Kharache Nikita Kendre	BP Measurement using Machine Learning	pranali.yawle@bharatividyapeeth.edu saeekad31@gmail.com rutujakharche2002@gmail.com
3	Sanah Naik Ankita Ochani Sakshi Pratap	EEG Report analysis and anomaly detection using Machine Learning	sonali.kadam@bharatividyapeeth.edu
4	Pranjal Suryawanshi Vaishnavi Pasalkar Tanvi Sanekar	Real time weather monitoring information system	sonali.kadam@bharatividyapeeth.edu
5	Tanaya Mane Yogita Khalate Smiti Chandwadkar	Robotics framework for IT recruitments	ketaki.naik@bharatividyapeeth.edu
6	Shreya Nilakh Trupti Pacharne Shreya Mohite	AI clarion food/Product safety using OCR	ketaki.naik@bharatividyapeeth.edu

BHARATI VIDYAPEETH'S
COLLEGE OF ENGINEERING FOR WOMEN
(Recognised by AICTE, New Delhi, DTE Mumbai & Affiliated to Savitribai Phule Pune University)
Accredited with 'B+' Grade by NAAC in 2018
• Id No. : PU/PN/Engg./150/2000 • DTE College Code : EN6285

Ref. No. : BV / COEW / 550 / 2023 - 24

Date : 23/9/23.

To,

Dr. V.K. Bairagi,

Professor & Dean Academics

AISSM'S IOIT,

Pune-43

Sub:- Vote of Thanks

Dear Sir,

We express our profound Gratitude for accepting our invitation as an expert for College level Avishkar-2023-a prestigious project competition organized on 25th September 2023 organized at our institute. We are sure that your expert knowledge will help us to scrutinize the potential projects.

We profusely thank you for sparing your valuable time and giving suggestions.

Thanking You.

Dr. Vijaya Pawar

ARC

Received.

Prof. Dr. S.R. Patil

Principal

I/C PRINCIPAL
Bharati Vidyapeeth's
College of Engineering for Women
Pune-Satara Road, Pune-411043.

BHARATI VIDYAPEETH'S
COLLEGE OF ENGINEERING FOR WOMEN
(Recognised by AICTE, New Delhi, DTE Mumbai & Affiliated to Savitribai Phule Pune University)
Accredited with 'B+' Grade by NAAC in 2018
● Id No.: PUPN/Engg./190/2000 ● DTE College Code: EN6285

: Founder :
Dr. Patangrao Kadam
M.A., LL.B., Ph.D.

: I/C Principal :
Prof.(Dr.) S. R. Patil
Ph.D. (EC & CSE) LMISTE, FIETE

Ref. No. : BV / COEW/ 552 /2023-24

Date : 25/9/2023

To,

Mr. Priti Jain,

Assistant Professor,

Pune Institute of Computer Technology,

Pune-43

Sub :-Vote of Thanks

Dear Madam,

We express our profound Gratitude for accepting our invitation as an expert for College level Avishkar-2023-a prestigious project competition organized on 25th September 2023 organized at our institute. We are sure that your expert knowledge will help us to scrutinize the potential projects.

We profusely thank you for sparing your valuable time and giving suggestions.

Thanking You.

Dr. Vijaya Pawar

ARC

Prof. Dr. S.R. Patil

I/C PRINCIPAL
Bharati Vidyapeeth's
College of Engineering for Women
Pune-Satara Road, Pune-411 043.

Pune-Satara Road, Dhankawadi, Pune 411 043.
Phone : (020) 24371684, 24372210 (Fax), Email : coewpune@bharatividyapeeth.edu
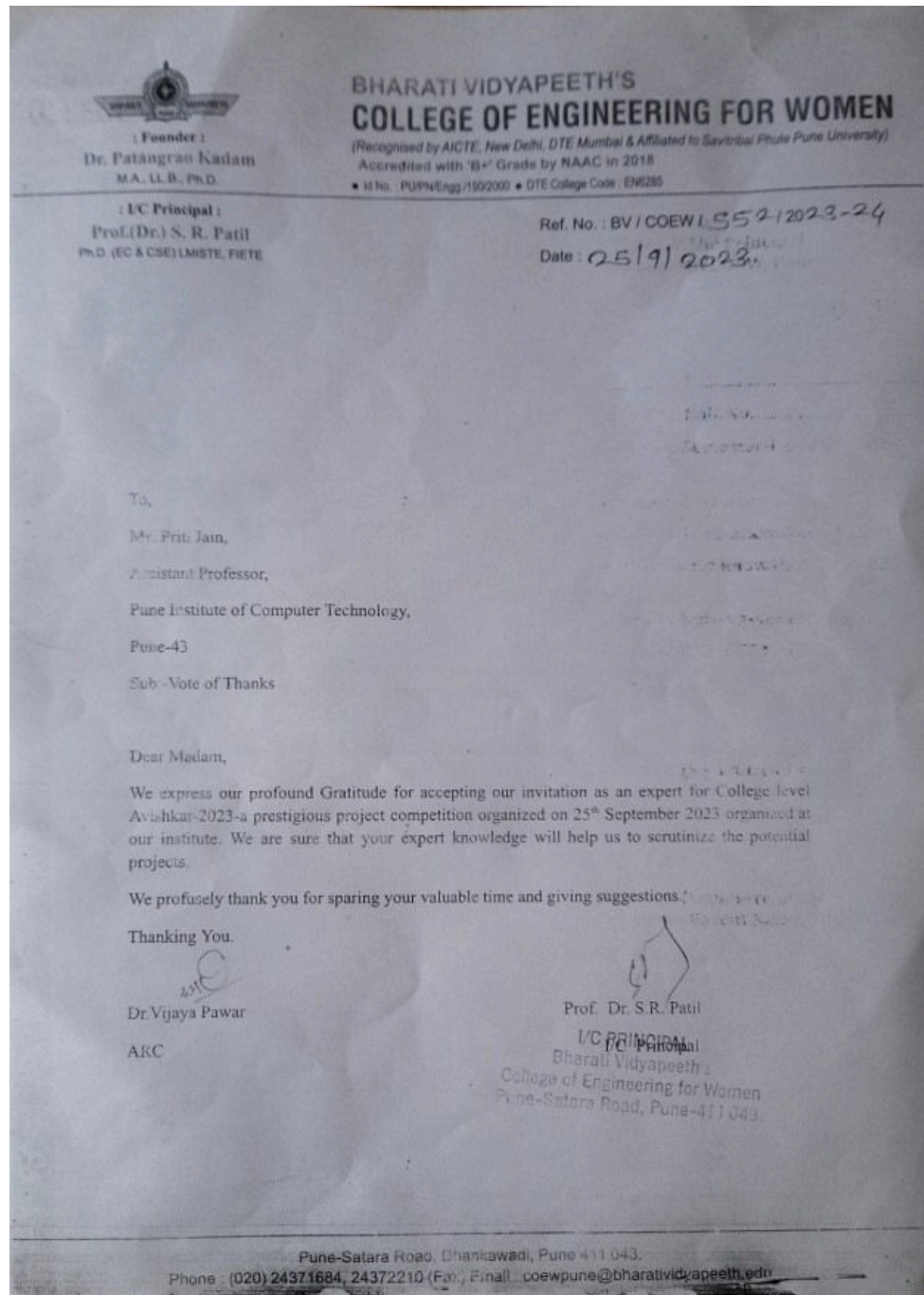
भारती विद्यापीठाचे
महिला अभियांत्रिकी महाविद्यालय
कात्रज–धनकवडी, पुणे – ४११ ०४३.
खर्चाची पावती
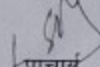
मा. प्राचार्य,महिला अभियांत्रिकी महाविद्यालय, कात्रज–धनकवडी, पुणे ४३, यांना, पावती लिहून देणार सौ./श्री. Prof Dr. V. K. Bairagi पत्ता BVCOEW, Pune-43

खाते _____ दिनांक / /२०

तपशील	रुपये	पैसे
PPU-Avishkar - college Level conduction as an Expert.	1500 =	oo
एकूण अक्षरी रुपये One thousand & five Hundred only फक्त	1500 =	oo.

वरील तपशीलाप्रमाणे रक्कम रोख / चेकने मिळाली, आभारी आहोत. चेक नंबर ___ बँक ___

प्राचार्य   अकॉटंट   सही ....

SAVITRIBAI PHULE PUNE UNIVERSITY
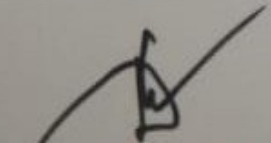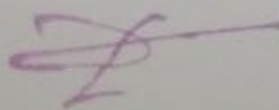
Internal Quality Assurance Cell (IQAC)

AAVISHKAR - 2023

ZONAL LEVEL RESEARCH PROJECT COMPETITION

Certificate of Participation

This is to certify that Mr./Miss. _Vaibhavi Jorande_

of _Bharati Vidypeeth College of Engg. Women_ College/Institute has participated

in Zonal Level Research for UG ✓ / PG / Post PG (M.Phil. / Ph.D.) at **"AAVISHKAR 2023"** Research

Festival, Under _Engg. & Tech_ category, held at _AISSMS COE_

_____ during ____27/10____ 2023.

Coordinator

Principal

Prof. Sanjay Dhole
Director, IQAC

SAVITRIBAI PHULE PUNE UNIVERSITY
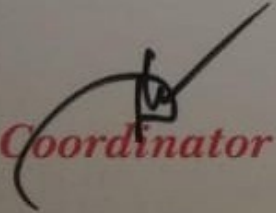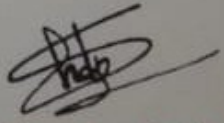
Internal Quality Assurance Cell (IQAC)

AAVISHKAR - 2023

ZONAL LEVEL RESEARCH PROJECT COMPETITION

Certificate of Participation

This is to certify that ~~Mr.~~/Miss. **RUTUJA KHARACHE**

of _____ College/Institute has participated in Zonal Level Research for UG ✓ / PG / Post PG (M.Phil. / Ph.D.) at **"AAVISHKAR 2023"** Research Festival, Under **ENGINEERING & TECH.** category, held at **AISSMS, COE, PUNE** during **27 - 10 -** 2023.

Coordinator

Principal

Prof. Sanjay Dhole
Director, IQAC

BHARATI VIDYAPEETH'S
COLLEGE OF ENGINEERING FOR WOMEN, PUNE
Pune-Satara Road, Dhankawadi, Taluka – Haveli, Dist.- Pune
Accredited by NAAC, Affiliated to Savitribai Phule Pune University (SPPU)
Approved by DTE. Govt. Of Maharashtra and AICTE, New Delhi
DTE Institute Code-EN6285, Pun Code-PU/PN/Engg. /150/2000
E-mail: -coewpune@bharatividyapeeth.edu   Website: - http://coewpune.bharatividyapeeth.edu

Report on Avishkar Competition 2023

The **Avishkar 2023**, a college-level project competition, was successfully conducted on **25th September 2023**. This event aimed to showcase the innovative projects developed by students across various departments.

The competition was graced by eminent judges:

- **Prof. Dr. V.K. Bairagi**, Professor at AISSMS IOIT, evaluated projects from the Electronics & Telecommunication Engineering department.
- **Dr. Priti Jain** judged the projects presented by the Computer Engineering department.

From each department, **two outstanding projects** were shortlisted to represent the college at the Zonal Project Competition.

The event also witnessed the esteemed presence of:

- **Prof. Dr. S.R. Patil**, Principal, Bharati Vidyapeeth's College of Engineering for Women.

Additionally, the following faculty members contributed to the event's success:

- **Prof. Dr. Vijaya Pawar**, Academic and Research Coordinator.
- **Prof. Dr. Sampada Dhole, Project Coordinator- E&TC Engg.**
- **Prof. Dr. Ketaki Malgi, Project Coordinator- Project Coordinator- IT**
- **Prof. Dr. Shweta Salunkhe, Project Co-Coordinator- E&TC Engg.**
- **Prof. V.D. Kulkarni, Project Coordinator, Comp. Engg.**

The competition served as a platform for students to demonstrate their creativity and technical skills, fostering a spirit of innovation and collaboration

Pune, Maharashtra, India

Groud floor, Women's College of Engineering, Satara Road, Dhankawadi, FV54+H3G, Dhankawadi Rd, Bharati Vidyapeeth Campus, Dhankawadi, Pune, Maharashtra 411043, India

Lat 18.458973°

Long 73.85533°

25/09/23 01:42 PM GMT +05:30

Google

Bharati Vidyapeeth's College of Engineering for Women, Pune

Avishkar - 2022

Contents

IQAC SPPU letter

Invitation Letter to the resource person

Gratitude Letter to the resource person

Honorarium

Evaluation Report of IT, E&TC, Comp. Engg

Shortlisted projects for Zonal level

Report

Photographs

News on LinkedIn

}Principal

Prof. Dr. S.R. Patil
I/C PRINCIPAL
Bharati Vidyapeeth's
College of Engineering for Women
Pune-Satara Road, Pune-411043.

Regn. No.
740-69-009
(NDEG-APR)
ET/2000

Hon, Director,

IQAC Cell, Savitribai Phule Pune University
Ganeshkhind, Pune,

Maharashtra 411007

Sub:- College level Avishkar-2022 conduction.

Dear Sir,

Thank you for giving the opportunity to conduct College level Avishkar-2022.

As per the directions given we are herewith submitting the report of College level

Avishkar-2022.

ARC

Principal,

Attachments:-

1. List of the participants

2. Two Geo-tagged Photographs

3. One Video Clip

4. A3 size poster

5 Abstract

: Founder :
Dr. Patangrao Kadam
M.A., LL.B., Ph.D.

: I/C Principal :
Prof.(Dr.) S. R. Patil
Ph.D. (EC & CSE) LMISTE, FIETE

COLLEGE OF ENGINEERING FOR WOMEN
(Recognised by AICTE, New Delhi, DTE Mumbai & Affiliated to Savitribai Phule Pune University)
Accredited with 'B+' Grade by NAAC in 2018
Ref. No. (IPN/Engg./150/2000 • DTE College Code : ENG285

Ref. No. : BV / COEW / 880 / 2022-23

Date : 8/9/22

To,

Dr. V.K. Bairagi,

Professor,

AISSM'S IOIT,

Pune-43

Sub.- Invitation as an expert for College Level Avishkar-2022 on 8th September 2022.

Dear Sir,

College Level Avishkar-2022 research project computation is organized on 8th September 2022 at 9.00 am to 11 am at Bharati Vidyapeeth's College of Engineering for Women, Pune-43.

We will be obliged to have you as a subject expert and to scrutinize the projects to be send to the zonal level.

We are sure that your expert knowledge will help us to scrutinize the potential projects

Thanking You.

Dr. Vijaya Pawar

ARC

Prof. Dr. S.R. Patil
I/C PRINCIPAL
Bharati Vidyapeeth's
College of Engineering For Women,
Katraj, Dhankawadi, Pune-43

Ref. No. : BV / COEW / 381 / 20 22-23

Date : 8 / 9 / 22

To,

Dr. V.K. Bairagi,

Professor,

AISSM'S IOIT,

Pune-43

Sub:- Vote of Thanks

Dear Sir,

We express our profound Gratitude for accepting our invitation as an expert for College level Avishkar-2022-a prestigious project computation organized on 8th September 2022, organized at our institute. We are sure that your expert knowledge will help us to scrutinize the potential projects.

We Profusely thank you for sparing your valuable time and giving suggestions.

Thanking You.

Dr. Vijaya Pawar

ARC

Prof. Dr. S.R. Patil
I/C PRINCIPAL
Bharati Vidyapeeth's
College of Engineering For Women,
Katraj, Dhankawadi, Pune-43

Regn. No.
740-69-009
(NDEG-APR)
ET/2000
PUNE-43

भारती विद्यापीठाचं

महिला अभियांत्रिकी महाविद्यालय

कात्रज-धनकवडी, पुणे - ४११ ०४३.

खर्चाची पावती

मा. प्राचार्य, महिला अभियांत्रिकी महाविद्यालय, कात्रज-धनकवडी, पुणे ४३, यांना,
पावती लिहून देणार श्री./श्री. **Dr. V. K. Bairagi** पत्ता **AISSM'S IOIT**

ग्राम _____ दिनांक **08 9 / २०२२**

तपशील	रुपये	पैसे
Honorarium For college Level	1500	00
AVishkar - 2022.		
एकूण अक्षरी रुपये **One thousand Five Hundred only** पात्र	1500	00

वरील तपशीलाप्रमाणे रक्कम रोख / चे नं विद्यार्थी, आभारी आहोत. चेक नंबर _____ बँक _____

प्राचार्य   अकौंटंट   सही ....

BHARATI VIDYAPEETH'S
COLLEGE OF ENGINEERING FOR WOMEN

(Recognised by AICTE, New Delhi, DTE Mumbai & Affiliated to Savitribai Phule Pune University)
Accredited with 'B+' Grade by NAAC in 2018
● Id No. : PU/PN/Engg./150/2000 ● DTE College Code. EN6285 ● Reg. No : 740-69-009 (NDEG-APR) ET/2000

Ref. No. : BV / COEW / 378 / 2022-23

Date : 8/9/22

To,

Dr. Archana Ghotkar,

Professor,

Pune Institute of Computer Technology,

Pune-43

Sub:- Invitation as an expert for College Level Avishkar-2022 on 8th September 2022.

Dear Madam,

College Level Avishkar-2022-a prestigious project computation is organized on 8th September 2022 at 2.00 pm to 4.00pm at Bharati Vidyapeeth's College of Engineering for Women, Pune-43.

We will be obliged to have you as a subject expert and to scrutinize the projects to be send to the Zonal level.

We are sure that your expert knowledge will help us to scrutinize the potential projects.

Thanking You.

Dr. Vijaya Pawar

ARC

Prof. Dr. S.R. Patil
I/C PRINCIPAL
Bharati Vidyapeeth's
ge of Engineering For Women,
Katraj, Dhankawadi, Pune-43

BHARATI VIDYAPEETH'S
COLLEGE OF ENGINEERING FOR WOMEN
(Recognised by AICTE, New Delhi, DTE Mumbai & Affiliated to Savitribai Phule Pune University)
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● Id No : PU/PN/Engg /150/2000 ● DTE College Code : EN6285 ● Reg No : 740-69-009 (NDEG-APR) ET/2000

: Founder :
Dr. Patangrao Kadam
M A , LL B , Ph D

: I/C Principal :
Prof.(Dr.) S. R. Patil
Ph D (EC & CSE) LMISTE, FIETE

Ref. No. : BV / COEW / 379 / 2022-23

Date : 8|9|22

To,

Dr. Archana Ghotkar,

Professor,

Pune Institute of Computer Technology,

Pune-43

Sub.-Vote of Thanks

Dear Sir,

We express our profound Gratitude for accepting our invitation as an expert for College level Avishkar-2022-a prestigious project computation organized on 8th September 2022 organized at our institute. We are sure that your expert knowledge will help us to scrutinize the potential projects.

We profusely thank you for sparing your valuable time and giving suggestions.

Thanking You.

Dr. Vijaya Pawar

ARC

Prof. Dr. S.R. Patil
I/C PRINCIPAL
Bharati Vidyapeeth's
College of Engineering For Women,
Katraj. Dhankawadi, Pune-43

Regn. No.
740-69-009
(NDEG-APR)
ET/2000

Bharati Vidyapeeth's College of Engineering for Women, Pune-43

College Level Avishkar-2022

Evaluation Form

Name of the Department: - Information Technology   Date 8/9/2022

Venue :203-Network Laboratory   Time: 11:00 am

Sr. No	Title of the Project	Relevance 20M	Methodology adopted 20M	Contribution 20M	Innovativeness 20M	Outcome 20M	Total 100M
1	Detection of Dyslexia, Autism, and ADHD in school going children using Artificial Intelligence.	19	19	19	19	17	93
2	Sign Language Recognition based on Hand Symbol using Machine Learning.	19	19	19	17	15	89
3	Detecting the psychological impact of online games and social media using Artificial Intelligence.	19	18	19	19	17	92
4	Crop recommendation based on soil analysis using Machine Learning.	18	18	19	17	15	87
5	Automated Stress detection by applying deep learning techniques on Video and Audio.	17	19	19	18	18	91

Prof. V. G. Dixit

P.E.S. Modern College of Engineering

(Name of the expert and Sign)

Bharati Vidyapeeth's College of Engineering for Women, Pune-43

College Level Avishkar-2022

Evaluation Form

Name of the Department:- E&TC Engineering   Date 08/09/2022

Sr. No	Title of the Project	Relevance 20M	Methodology adopted 20M	Contribution 20M	Innovativeness 20M	Outcome 20M	Total 100M
1	Kidney stone prediction using neural network.	15	16	10	10	-	51
2	Sign boards-signal detection and speed control vehicle using image processing with Raspberry pi	17	17	10	12	-	56
3	Voice Controll door locking system and LPG leakage detector	18	17	10	13	-	58
4	Music Recommen-dation based on face emotion Recognition.	14	12	8	10	-	44
5	Real Time Eye Blinking for Passw-ord Authenticat?on with Retina recognition	10	10	8	8.	-	36
6	melanoma skin cancer detection using Image processing and deep learning	15	15	8	9	-	47
7	Real time face mask detection	15	15	10	15	-	55

Name of the expert and Sign

Bharati Vidyapeeth's College of Engineering for Women, Pune-43

College Level Avishkar-2022

Evaluation Form

Name of the Department:- Computer Engineering   Date 8/9/2022

Sr. No	Title of the Project	Relevance 20M	Methodology adopted 20M	Contribution 20M	Innovativeness 20M	Outcome 20M	Total 100M
1	Prediction of Stock Paice Using Sophisticated Machine Learning Techniques	16	17	15	18	19	85
2	PERSONALITY PREDICTION ON CV & TWEET USING MACHINE LEARING	16	17	15	18	17	83
3	BREAST CANCER DETECTION	16	17	15	17	15	80
4	COMBINING SATELSTIL IMAGERY FOR POVERTY PREDICTION	16	15	15	17	15	78
5	ANIMAL DETECTION AND IDENTIFICATION USING DEEP LEARNING	18	18	16	18	19	88
6	SIGN LANGUAGE GESTURE RECOGNITION FROM VIDEO SEQUENCES.	19	19	16	18	19	90

Name of the expert and Sign

Dr. A. S. Ghotkar

Bharati Vidyapeeth's College of Engineering for Women, Pune-43

College Level Avishkar-2022

Evaluation Form

Name of the Department:- E&TC Engineering   Date 08/09/2022

Sr. No	Title of the Project	Relevance 20M	Methodology adopted 20M	Contribution 20M	Innovativeness 20M	Outcome 20M	Total 100M
1	Performance Evaluation of Compact high efficiency circularly Polarized cavity backed Substrate Integrated	16	17.	17	16	17	83
2	waveguide Monopole Tracking Antenna						
3							
4							
5							
6							
7							

Name of the expert and Sign

Computer Engineering Department
A.Y. 2022-23, Sem-I
BE Project Groups selected for Avishkar presentation

Group. no.	Sr. No.	Student Name	Project Title
2	1	Bipali Gade	Sign Language Gesture Recognition from Video Sequences
	2	Sejal Dahake	
	3	Veena Gayathri	
	4	Nashia Fatema	
3	5	Komal Dudhane	Wild Animal detection and Identification using deep learning
	6	Shreya Dawghat	
	7	Anushka Deshmukh	
	8	Sharwari Deshmukh	

Project.
co-ordinator

Regn. No.
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(NDEG-APR)
ET/2000
BHARATI VIDYAPEETH'S COLLEGE OF ENGINEERING FOR WOMEN * PUNE-43.

Computer Engineering Department
A.Y. 2022-23, Sem-I
BE Project Group list shortlisted for department level Avishkar presentation

Group. no.	Sr. No.	Student Name	Project Title
1	1	Sakshi Phatak	Breast Cancer Detection
	2	Sukhpreet Kaur	
	3	Siddhi Thopate	
	4	Divya Maske	
2	5	Bipali Gade	Sign Language Gesture Recognition from Video Sequences
	6	Sejal Dahake	
	7	Veena Gayathri	
	8	Nashia Fatema	
3	9	Komal Dudhane	Wild Animal detection and Identification using deep learning
	10	Shreya Dawghat	
	11	Anushka Deshmukh	
	12	Sharwari Deshmukh	
4	13	Kriti Sharma	Personality classification on Curriculum Vitae and Twitter post using Machine Learning
	14	Shreya Lodhi	
	15	Shreya Sahu	
5	16	Aishwarya Kottapalli	Prediction of stock price using sophisticated machine learning techniques
	17	Suhasi Gadge	
	18	Piyusha Patil	
	19	Shital Patil	
6	20	Vaishnavi Bankar	Combining satellite imagery for poverty prediction
	21	Priya Raut	
	22	Payal Salunkhe	
	23	Shreya sonawane	

Project
Co-ordinator.

H

Bharati Vidyapeeth's College of Engineering for Women, Pune-43

Avishkar 2022

REPORT

As per the guidelines issued by IQAC, SPPU, Pune College level Avishkar is conducted at Our institute.

Prof. Dr. V.K.Bairagi,Professor, AISSMSIOIT, Pune, and Prof. Dr. Archana Ghotkar, Associate Professor , IT Dept. PICT were invited as a expert resource person for E&TC Engg. and Computer / IT projects evaluation. 6 projects are shortlisted from 14 projects for the zonal level.

Dr. Bairagi elaborated the importance of Avishkar Participation and delivered brief guideline about do's and don'ts of poster making. Dr. V.R. Pawar ARC coordinated the event in association with Depart Project In-Charge, Prof. Dr. S.A.Dhole, Prof. Dr. Malgi K.A. and Prof. Kulkarni Vinaya.

Prof. Dr. S.R.Patil congratulated the Students and offered best wishes for further Avishkar journey.

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