

TECHPULSE



**Fr. Conceicao Rodrigues College of Engineering,
Bandra, Mumbai**

Moulding Engineers Who Can Build The Nation



**DEPARTMENT OF COMPUTER
SCIENCE AND ENGINEERING**

ISSUE NO: 7

YEAR 2024-25



VISION

To mould high-quality, innovative, and ethical engineers to become part of the global workforce and contribute to the betterment of society.

MISSION

Provide students with a skill-based education that will help them master problem solving and analytical skills, as well as expand their domain expertise.

Promote continuous learning and research in the core and emerging areas of AI and Data Science.

Facilitate an excellent scholastic environment for students and faculty by developing center of excellence in advanced technology.

Program Educational Objective

Innovate, create, analyze, design, implement, and test AI-based solutions to solve real-world business problems.

Adapt to changing AI-DS technology and use it in a multidisciplinary context.

Develop and demonstrate leadership and interpersonal skills in their chosen field.

Program Specific Outcomes

The graduates of the BE in Computer Science and Engineering program will have a strong foundation and the ability to use cutting-edge AI tools and techniques to innovate and develop new solutions.

FORWARD FROM HOD

Navigating the AI Era: A Message to Our Future Engineers



Dr. Jagruti Save

Artificial Intelligence has moved rapidly from theory to practice. What students once encountered only in textbooks or research discussions now is already embedded in our everyday lives—powering smartphones, search engines, streaming platforms, navigation systems, healthcare diagnostics, financial systems, and even creative tools. As a result, Industry today demands more than just degrees. Employers increasingly prioritize skills, adaptability, and hands-on experience over formal qualifications. For students of Computer domain, this moment presents both an extraordinary opportunity and an intensely competitive challenge.

The role of engineers is not disappearing; it is evolving. Engineers who understand how to integrate AI tools into problem-solving, evaluate outcomes critically, and apply technology responsibly will define the next generation of innovation. Career paths in areas such as machine learning, data science, computer vision, and AI-enabled product development are already expanding across industries.

Preparing for this shift requires a focus on core competencies such as AI awareness, data understanding, ethical responsibility, analytical thinking, and lifelong learning. Beyond classroom learning, hands-on projects, internships, online courses, and participation in technical communities are essential. Even a few focused hours of learning each week can make a significant difference over time.

As a department, we are committed to supporting skill-based, future-oriented learning. At the same time, personal initiative remains the most important factor in professional success. You are entering the profession at a defining moment in history. The same technology that increases competition also democratizes opportunity. Students from any background, and any starting point can build successful careers—provided they are willing to learn, adapt, and evolve.

Do not view Artificial Intelligence with hesitation.

Learn to use it thoughtfully. Work alongside it effectively. Apply it responsibly.

The future will not be shaped by machines alone, but by engineers who are prepared to guide and govern their use.

“The illiterate of the 21st century will not be those who cannot read and write, but those who cannot learn, unlearn, and relearn.”

Alvin Toffler

FACULTY ACHIEVEMENTS

Dr. Swapnali Makdey and Dr. Sarika Davare have received doctorate degrees.



Dr. Swapnali Makdey

VNIT Nagpur

Thesis Title :

“Design of 2D Material Based Devices”

Dr. Sarika Davare

Ajeenkya D. Y. Patil
University Pune

Thesis Title: “Prediction of Occurrence of Life-Threatening Disease (Lung Cancer) based on lifestyle using Machine Learning and Artificial Intelligence Techniques”



FACULTY ACHIEVEMENTS



Dr. Sarika Davare
National Initiative for Technical
Teachers Training

Ms. Prachi Dalvi
National Initiative for Technical
Teachers Training



DEPARTMENT EVENTS

ATAL Six Days Online Faculty Development Program on
"The Role of Artificial Intelligence in Sustainable Waste Management"
10-15, Feb 2025

Zoom Workplace Meeting | Prachi Dalvi's screen | Sign in | Recording | View | 89 Participants

Saurabh Kulkarni | Dr. A.D. Sawant | Prachi Dalvi | Aditi Malkar

AICTE'S Training and Learning (ATAL) Faculty Programme

Role of AI in Sustainable Waste Management

Prof.(Dr). A.D.Sawant
Former: Prof of Chemistry and Environmental Science, Inst. Of Science, Mumbai.
Pro VC, Mumbai University
VC, University of Rajasthan, Jaipur.
Email: arundsawant@gmail.com

on
10th February 2025
@
Er. Conceicao Rodrigues College of Engineering, Bandra, Mumbai-400050

Participants (89):

- Vijay Shelake
- Vinoth Kumar
- Dr. Vanaja Chirchi
- Dr. VIVEK P M - Vel Tech Rangar...
- Amar V Navalihalkar
- SARITHA V
- Asha SRM VEC
- Dr. Shilpa Verma
- Chris Merin Varghese
- Divakar Vaishnavi
- Savita Gavande patil
- Suvodeep Roy

Audio | Video | Participants | Chat | React | Share | AI Companion | More | Leave

Saurabh Kulkarni | Dhananjay Kalbande | Prachi Dalvi | nawal dandekar

How AI is Revolutionizing Solid Waste Management

Participants (106):

- Saurabh Kulkarni (Me)
- Prachi Dalvi (Host)
- Dhananjay Kalbande
- (ICEEM) Ameykumar Shivraj Ka...
- 977323
- Aditi Malkar
- ADITYA KUMAR
- Afreenzehra Sayed
- Amar V Navalihalkar
- Anandkumar Pardeshi
- Aniket Shahade
- Anurika Mehta

Audio | Video | Participants | Chat | React | Share | AI Companion | More | Leave

DEPARTMENT EVENTS

Faculty Development Program on
“Intellectual Property Rights”
held on 19 April, 2025.



DEPARTMENT EVENTS

PARENT TEACHER MEETING

5 APRIL 2025

- To make parents aware of the department vision and recent developments in the department.
- To discuss and exchange ideas on the holistic development of the students.
- To orient students towards the autonomy status, examination, and academic rules.



INDUSTRIAL VISITS

Vervali Systems Pvt. Ltd – Software testing and development
Company

Date of Visit: 1 March 2025



INDUSTRIAL VISITS

Cyber Police Station, Nerul Navi Mumbai Police
Commissionerate, CBD Belapur

Date of Visit: 7 February 2025



STUDENTS' ACHIEVEMENTS



DIVYAL PATIL (BEAI & DS), SECURED 1ST PLACE AT SPIT HACK'25 HELD ON 10 FEBRUARY 2025 AT SARDAR PATEL INSTITUTE OF TECHNOLOGY.

BE AI & DS STUDENT WON FIRST PLACE IN INTRA COLLEGE SHORT-FILM COMPETITION AND 3RD PLACE IN INTER COLLEGE SHORT-FILM COMPETITION, HELD ON 22 JANUARY 2025



TE AI & DS STUDENTS SECURED 2ND PRIZE IN THE SOFTWARE PROJECT CATEGORY AT IEEE TECHNOVATION 2025 HELD ON 12 APRIL 2025



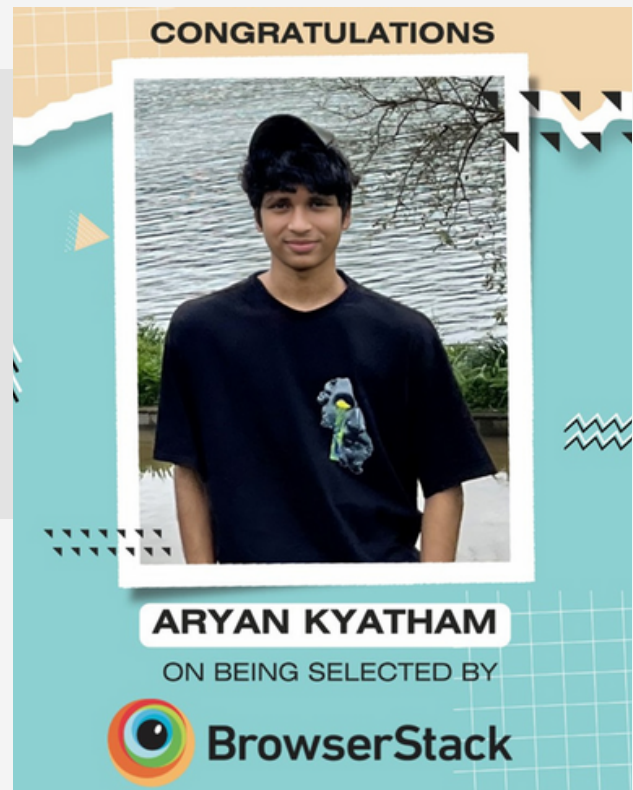
STUDENTS' ACHIEVEMENTS

HIGHEST PACKAGE IN THE
DEPARTMENT

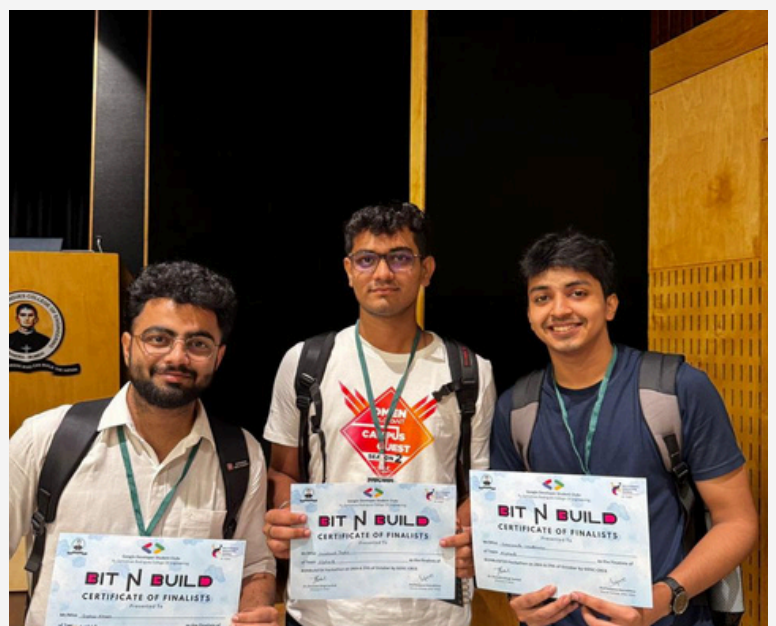
22 LPA



SAHIL KHAN (BE AI & DS) TEAM
CAME 1ST IN BIT N BUILD
HACKATHON HELD ON 27/10/2024
AI/ML DOMAIN



8TH TIME HACKATHON WINNERS,
ARYAN KHYATAM AND SHARVIN
GAVAD (BE AI & DS)



STUDENTS' ACHIEVEMENTS

ARPITA KATKAM AND SANIKA THAKUR (BE AI&DS), GOT 1ST PLACE IN GIRLS DOUBLES.
AND BRIGHT CARVALHO AND ARON PEREIRA WON 1ST PLACE IN BOYS DOUBLES.



CRESCENDO 2024
MECH-A-THON RUNNER-UPS,
SANIKA THAKUR
LANCE CORREIA
NEVIL NARIKOD



CHAITANYA RELE, KAUSTUBH NATU AND ADITYA RATHOD SECURED A PRIZE IN THE FINAL ROUND OF SOFTWARE PROJECT CATEGORY AT IEEE TECHNOVATION APRIL 2025.



STUDENTS' ACHIEVEMENTS

PEEP SIGHT AIR RIFLE MEN
(INDIVIDUAL)- 20-22 SEP 2024
SECOND PLACE,
SILVER MEDAL IS WON BY
ATHARVA RANJIT PATIL (T.E. - AI & DS)



TEJAS SALVI
ABDUSSAMI QAZI
AAREN SOLANKI
(TE AI & DS)

FIRST PRIZE IN HACKDECK,
HACKATHON ORGANISED BY
ATHARVA COLLEGE OF
ENGINEERING
27-28 SEPT 2024

STUDENTS' ACHIEVEMENTS



Best BE Class Award- BE AI & DS
BE All-rounder Award- Aryan Khyatam
Best FE Class Award- FE CSE
Winner Girls Sports-FE CSE
Winner Boys Sports- TE AI & DS
Cultural Trophy-AI & DS



TRAINING AND PLACEMENTS

Highest Package :22 LPA
Average Package : 5.82 LPA
Lowest Package : 3.5 LPA



TRAINING AND PLACEMENTS

Placement orientation session by Prof. Jayen Modi

held on 3 April 2025.



INTERNSHIP

Total No. of Students : 65

No. of students having Internship: 60

No. of students doing Certification course: 5

Highest stipend offered: Rs.75000

Lowest stipend offered: Rs.2000



INTERNSHIP

22 Students were offered performance based internship in companies like Block intelligence, Oxcytech Technologies, etc

HIGHEST STIPEND OFFERED

STIPEND	COMPANY	STUDENT
75,000 ₹	BrowserStack	Aryan Kyatham
40,000 ₹	BrowserStack	Divyal Patil
37,500 ₹	SoftPro Solutions	Punit Gavali
33,000 ₹	DoubleTick	Sahil Khan Janet Nelson

7 Students were offered internship with PPO in companies like Double Tick, IDFC, Arcon, Etc.

31 Students were offered internship with stipend in companies like BrowserStack, Astra Cybertech, SK Robotics, Softpro solutions, etc.

STUDENT DEVELOPMENT PROGRAM

Student development program on “Cloud computing”
held on 21/3/2025,
Total 63 students participated in the program.



The poster features the logos of the institution and the Department of CSE/AI&DS. It includes the title of the program, the speaker's name, the date and time, and the venue. A circular portrait of the speaker is also present.

FR. CONCEICAO RODRIGUES COLLEGE OF ENGINEERING
MOLDING ENGINEERS WHO CAN BUILD THE NATION

DEPARTMENT OF CSE/AI&DS PRESENTS
STUDENT DEVELOPMENT PROGRAM
ADVANCES IN CLOUD COMPUTING

SPEAKER - ISHWAR HIWALE

TEACHER CO-ORDINATORS
MRS. GARIMA TRIPATHI
MRS. SAVITA BOROLE

21 MARCH, 2025
09:00 AM

VENUE - 708



GUEST LECTURES FOR STUDENTS

Guest Lecture on “beyond the Degree: How to land a job in Tech”,
by Puja Sharma
on 14 June 2025



FR. CONCEICAO RODRIGUES
COLLEGE OF ENGINEERING

DEPARTMENT OF
ARTIFICIAL INTELLIGENCE AND DATA SCIENCE
PRESENTS

Beyond the Degree
How to actually land a job in tech

OUR SPEAKER:

Puja Sharma
Full Stack Developer
Berkeley Canada, Toronto

ABOUT OUR SPEAKER:
Passionate about AI, Graph Neural Networks, and building innovative insurance tech solutions

14TH JUNE, 2025

9:00 AM - 10:30 AM

GOOGLE MEET



An Autonomous Institution Under The University of Mumbai | Awarded Grade 'A' by NAAC

DEPARTMENT OF ARTIFICIAL
INTELLIGENCE AND DATA SCIENCE

WEBINAR

Practical Cryptography With
OpenSSL

Monday
April 14, 2025
8.15 AM - 9:30 AM

Hanoz Darukhanawalla
Security Researcher
Juniper Networks, USA

JOIN US

meet.google.com/eov-jpnk-qar



Webinar on
“Practical Cryptography With
OpenSSL”
by
Hanoz Darukhanawalla
held on April 14, 2025

TEACHERS' DAY

Teachers' Day Celebration- 5th September, 2025. Glimpses



STAFF DEVELOPMENT PROGRAMS, SEMINARS

Sr.No	Name of Faculty	Title of Professional Development Program Attended by Teaching Staff	Organized by	Starting Date	Days	Type of Program(Seminar/Workshop/Orientation/FDP/S TTP/Certification)	Online/Offline
1	Swapnali Makdey	Navigating the Future of Decentralized Advanced Blockchain Technologies	ATAL FDP Organized by Fr. CRCE	12, Sept 2024	12	ATAL FDP	offline
2	Swapnali Makdey	Sustainable Development Goals 2030 : Bridging Gaps, Building Futures for Viksit Bharat @2047	India's Biggest Virtual Conference	18, Feb 2025	6	Conference	online
3	Swapnali Makdey	Innovative VLSI Paradigms: MEMS, 3D ICs, and AI-Driven Design	ATAL FDP	6, Jan 2025	6	ATAL FDP	online
4	Garima Tripathi	The Role of Artificial Intelligence in Waste Management	Fr.C.R.C.E	10, Feb 2025	6	ATAL FDP	online
5	Sarika Davare	Innovation Ambassador (IA) Training "Fundamental Level	MoE's Innovation Cell & AICTE		30Hrs	Certification	online

STAFF DEVELOPMENT PROGRAMS, SEMINARS

Sr.No	Name of Faculty	Title of Professional Development Program Attended by Teaching Staff	Organized by	Starting Date	Days	Type of Program(Seminar/Workshop/Orientation/FDP/STTP/Certification)	Online/Offline
6	Sarika Davare	Research Ethics and Plagiarism Detection	Madhya Pradesh Library Association in association with Bilani Group	29, June 2025	1	Certification	online
7	Saurabh Kulkarni	The Role of Artificial Intelligence in Waste Management	Fr.C.R.C.E	10, Feb 2025	6	ATAL FDP	Online
8	Saurabh Kulkarni	Communication skills, Modes and Knowledge Dissemination	NITTT	7, Jan 2025	2 Months	NITTT Certification	Online
9	Saurabh Kulkarni	Student Assessment and Evaluation	NITTT	7, Jan 2025	2 Months	NITTT Certification	Online
10	Saurabh Kulkarni	Creative Problem Solving, Innovation and Meaningful R&D	NITTT	7, Jan 2025	2 Months	NITTT Certification	Online

STAFF DEVELOPMENT PROGRAMS, SEMINARS

Sr.No	Name of Faculty	Title of Professional Development Program Attended by Teaching Staff	Organized by	Starting Date	Days	Type of Program(Seminar/ Workshop/Orientation/FDP/ STTP/Certification)	Online/Offline
11	Savita Borole	Navigating the Future of Decentralized Advanced Blockchain Technologies	ATAL FDP Organized by Fr. CRCE	9, Dec 2024	12	ATAL FDP	Offline
12	Savita Borole	The Role of Artificial Intelligence in Waste Management	Fr.C.R.C.E	10, Feb 2025	6	ATAL FDP	Online
13	Savita Borole	How to write and submit research papers in IEEE/Elsevier	SAKEC	31, Aug 2024	1	Hands on workshop	offline
14	Sumeet Shingi	Blockchain Technology: Innovations and Applications	DMCOE	31, Aug 2024	7	FDP	online
15	Sumeet Shingi	Latest Trends and Techniques in Digital Twin	MMCOE	7, Oct 2024	6	FDP	online
16	Sumeet Shingi	Navigating the Future of Decentralized Advanced Blockchain Technologies	FRCRCE	9, Dec 2024	13	FDP	Offline
17	Sumeet Shingi	Cyber Security & Digital Forensics	Advanced Innovative Instruments for Professional Learning	17, Dec 2024	4	STTP	Offline

STAFF DEVELOPMENT PROGRAMS, SEMINARS

Sr.No	Title of professional development program organized	Dates to and from	Duration in days	No. of participants	Mode of conduct	Type of program(fdp /sttp/seminar/workshop/ orientation
1	Atal FDP on "The Role of AI in sustainable waste management"	10th Feb to 15th Feb 2025	6	182	Online	ATAL FDP
2	Student development program on cloud computing	21, March 2025	1	63	Offline	Workshop

GUEST LECTURES

Sr.No	Course Name	Guest Lecture by	Designation	Organization	Date	Topic covered	No.of Attendees
1	Cryptography and System Security	Mr. Aditya Patil	Senior Security Monitoring Architect	Telstra, Australia	25, Feb 2025	Detecting Scattered Spider: through the lens of Mitre Att&ck framework	58
2	Sustainability	Nirmal Topiwala	Founder	ReThink Sustainability Evangelist	27, Feb 2025	Awareness of digital Footprint, Adoption of sustainable Practices, E-Waste management	60
3	Data analytics and Visualization	Usha Nattala	Senior Research and data scientist, Co founder of AirHealth	University of Melbourne	8, Jan 2025	Protect yourself from Thunderstorm Asthama using AI	70

TECHNICAL PUBLICATIONS

Sr. No	Name of Author	Paper Title	Publisher Name	Journal/Conference name	Month and year of publication
1	Ketaki Sarode, Nayonica Sherlin, Lyneshia Correa, Prof. Prachi Dalvi	Unveiling Social Media's Underworld: Machine Learning Empowered Drug Detection	IEEE	Proc. 3rd Int. Conf. Robot. Control Autom. Artif. Intell. (RCAAI), HYBRID mode, Manipal, India, Paper ID: 78.	Oct, 2024
2	Sheetal Kalbande, Rajvilas Karmore, Prachi Dalvi, Dhananjay K	Synergies and Impacts: National Educational Policy and Startup Policies on India's Innovation Ecosystem	IJARESM	International Journal of All Research Education and Scientific Methods (IJARESM),	June, 2024
3	Prachi Dalvi, Dhananjay R. Kalbande, Surendra Singh Rathod, Harshal Dalvi, Amey Agarwal	Multi-Attribute Deep CNN-Based Approach for Detecting Medicinal Plants and their Use for Skin Diseases	IEEE	IEEE Transactions on Artificial Intelligence., manuscript ID TAI-2024-Jun-A-00954.R1, 2024.	Jun, 2024

TECHNICAL PUBLICATIONS

Sr. No	Name of Author	Paper title	Publisher Name	Journal/ Conference name	Month and year of publication
4	Harshal Dalvi Meera Narvekar Prachi Dalvi Kunaal Vadgama Momin Kasmani Krish Ranawat	Interpreting Accuracy: A Comprehensive Analysis of AI Models for Liver Disease Diagnosis.	IEEE	Proceedings of the 2024 IEEE Parul International Conference on Engineering and Technology (PICET). 2024.	May, 2024
5	Joshua D'sylva,Riona Gonsalves,Prach i Dalvi,Swaranjali Bodhi	An Assessment of Artificial Intelligence and Machine Learning Applications in Remote Sensing for Crop Classification.	STM journal: IJCA	Sixth International Conference on Recent Trends in Engineering, Management, Pharmacy and Science– SAGECON2K24, 2024.	Mar, 2024
6	Prachi Dalvi, Dr. D.R. Kalbande, Amey Agarwal,	“Enhancing Plant Species Recognition: A Multi-Attribute Deep Learning Approach”	Springer	International Conference on Intelligent Computing and Big Data Analytics ICICBDA 2024.	Jun, 2024
7	Mrs. Aditi Amit Malkar1 Dr. Rahul Thour	Advancements and Challenges in Named Entity Recognition: A Comprehensive Survey	IJERD	International Journal of Enhanced Research in Educational Development (IJERED)	July.-August, 2024

TECHNICAL PUBLICATIONS

Sr.no	Name of Author	Paper Title	Publisher Name	Journal/Conference name	Monnth and Year of Publication
8	Nilesh P. Sable, Kirti H. Wanjale, Dr. Swapnali Makdey, Ketan J. Raut, Ashok Kanthe, Varsha Jadhav	"Efficient Component Packing with Algorithmic Optimizations"	Elsevier (scopus indexed)	Journal of Information Systems Engineering and Management	Dec, 2024
9	Dr.Ninad More, Dr.Swapnali Makdey, Kirti Wanjale, Puja Padiya, Nilesh Marathe, Kranti Vithal Ghag	"A New Approach to Natural Language Query Search using Frequency Analysis Techniques in Cloud Computing"	Elsevier (scopus indexed)	Journal of Information Systems Engineering and Management	Jan, 2025
10	Dr. Swapnali Makdey,Dr. Ashok Kanthe, Dr. Ninad More,	" A Novel Neural-Based Design of Graphene and Molybdenum Disulfide Magnetic Tunnel Junction",	Elsevier (scopus indexed)	Journal of Information Systems Engineering and Management	Jan, 2025
11	Sarika Davare, Vishal Shirsath, Farook Sayad	"Lung Cancer Detection, Prediction and Analysis of Lifestyle Parameters using ML and AI Techniques"	IJISAE	International Journal of Intelligent Systems And Applications In Engineering (IJISAE), ISSN:2147-6799, Vol. 12 No. 4	Jun, 2024

PATENTS

Faculty Name	Title	Application Date	Status
Sarika Davare	DocAssist: AI Doctor's Assistant	16, Oct 2024	--

EXTRA & CO-CURRICULAR ACHIEVERS

SE AI&DS & TE AI&DS

Sr. No.	Student Name	Class	Event name	Date	Organized by	Position
1	Atharva Patil	SEAI&DS	Intercollegiate Zone II shooting Tournament (Air Rifle Men 60 Shots)	20-22, Sep 2024	Tolani College of Commerce	2nd Place
2	Harshil Sampat	SEAI&DS	Under23 Championship Shotput	17, Aug 2024	Mumbai University	1st place
3	Harshil Sampat	SEAI&DS	Under23 Championship Discus Throw	16, Aug 2025	Mumbai University	2nd place
4	Abdussami Qazi	TEAI&DS	HackDeck	27-28 Sept 2024	Atharva College of Engineering	1st place
5	Aaren Solanki	TEAI&DS	HackDeck	27-28 Sept 2024	Atharva College of Engineering	1st place

EXTRA & CO-CURRICULAR ACHIEVERS

SE AI&DS & TE AI&DS

Sr. No	Students Name	Class	Event name	Date	Organized by	Position
6	Tejas Salvi	TEAI&DS	HackDeck	27-28 Sept 2024	Atharva College of Engineering	1st place
7	Abdussami Qazi	TEAI&DS	Innoquest	12-13 Dec 2024	K.J.Somaiya	1st place
8	Aaren Solanki	TEAI&DS	Innoquest	12-13 Dec 2024	K.J.Somaiya	1st place
9	Tejas Salvi	TEAI&DS	Innoquest	12-13 Dec 2024	K.J.Somaiya	1st place
10	Abdussami Qazi	TEAI&DS	GenAI-Thon	7-8 Feb 2025	SIES	1st place
11	Aaren Solanki	TEAI&DS	GenAI-Thon	7-8 Feb 2025	SIES	1st place
12	Tejas Salvi	TEAI&DS	GenAI-Thon	7-8 Feb 2025	SIES	1st place

ACM EVENTS

Sr no.	Activity/session	Short Information	Speaker/Judge	Date/Duration
1	AI/ML WORKS HOP	The workshop aimed to provide participants with a concise yet comprehensive introduction to AI/ML concepts, tools, and practical applications. The session was attended by participants, including students and faculty	Bilal Ahmed COO & CTO at Sahayak Mentoring.	3, Sept 2024
2	PYTHON AND DJANGO WORKS HOP	It focused on providing participants with foundational knowledge and hands-on experience in Python programming and Django web framework. It aimed to introduce students to the core concepts of web development using Django, is powered by Python, a popular programming language for building web applications.	Rishabh Pathak Chairperson of ACM	21/09/24 22/09/24
4	ML WORKS HOP	It provides comprehensive understanding of Machine Learning concepts, real-world applications, and hands-on experience through a simple project. It also included valuable insights on becoming an AI developer, making it an enriching experience for students interested in Artificial Intelligence and Machine Learning.	Rishabh Pathak -Chairperson of ACM & the founder of Tridenzic Infotech	04/02/2025 1 Hr
5	MY STORY	The primary objective of the session was to inspire students by sharing real-life experiences of successful entrepreneurs. Mr. Dodti captivated the audience by recounting his journey of becoming a prominent entrepreneur	Mr. Elvis Dodti - Alumni From the AIDS Department Of CRCE	08/11/24 1 Hr