FR. CONCEICAO RODRIGUES COLLEGE OF ENGINEERING
BANDRA - MUMBAI
MOULDING ENGINEERS WHO CAN BUILD THE NATION

THE BYTE STREAM

INNOVATE
INSPIRE
INTEGRATE

Department of
Computer Engineering

Official Newsletter – Issue 6

2024

Accredited with an 'A' grade by NAAC
NBA accredited since 2017-18 till June 2026

Computer Engineering Department

The Department was established in the year 1991. The intake capacity of the department has been increased to 180 and Master of Computer Engineering is started with intake 16 from the academic year 2024-25. To Promote Innovation and research, Department has started Ph.D. in Computer Engineering with Intake 10 from the academic year 2023-24.

The Department has competent, veteran and devoted faculty to provide industry-driven education to the students. The Department Infrastructure fulfills the requirements of academics and also supports research projects and learning skills to face the challenges of the industry. The Computer Engineering Department effectively prepares students to pursue leadership, technical and management positions in a variety of industries. The department has fetched many research grants. The department has a strong alumni network which further enriches the program by their involvement in departmental activities and guidance to students.

VISION OF DEPARTMENT

To be a center of excellence in Computer Engineering education that will produce self-motivated, and globally competent individuals through holistic development.

MISSION

- Build state-of-the-art infrastructure that can accommodate cutting-edge technology and is constantly updated in response to the needs.
- To emphasize on experiential learning and holistic development in order to pursue academic excellence and inculcate research aptitude through high-quality research publications
- Enable the students to foster innovative ideas in pace with the emerging technologies
- Encourage faculty members to pursue higher education/research and stay abreast with the latest technology.

Newsletter Highlights

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Message from the HOD

Dr. Sujata Deshmukh
Head of Department
Computer Engineering Department

Dear Students,

Welcome to the latest edition of Byte Stream Magazine, our special issue themed around "Innovate, Inspire, Integrate". This edition is particularly meaningful as it highlights our collective journey towards excellence, underscoring the importance of innovation, inspiration, and integration in the realm of technology.

Autonomous Status and Curriculum Reform: Our college's recent attainment of autonomous status marks a significant milestone. This autonomy empowers us to design and implement a curriculum that is both contemporary and comprehensive, aligning with the National Education Policy (NEP) 2020. The NEP 2020 emphasizes a multidisciplinary approach, flexibility in learning, and a robust integration of technology – principles that are at the core of our educational philosophy.

Innovate: Innovation is the cornerstone of technological advancement. Our department has consistently encouraged creative thinking and problem-solving. From cutting-edge research projects to participating in national and international hackathons, our students have proven that innovation is at the heart of our curriculum.

Inspire: Inspiration is what drives us to achieve beyond the ordinary. Our alumni, who have excelled in various fields, serve as a beacon of what is possible. Their achievements in leading tech companies and successful start-ups inspire current students to dream big and pursue their goals with passion and determination.

Integrate: Integration of knowledge across different domains is crucial in today's interdisciplinary world. Our curriculum is designed to ensure that students gain a comprehensive understanding of how technology integrates with other sectors, preparing them for diverse career paths. Collaborations with other departments and industry partnerships provide our students with a holistic educational experience.

Byte stream serves as a platform to celebrate the spirit of innovation, inspiration, and integration within the Computer Department, reflecting the achievements of students and alumni while highlighting the department's activities and technological advancements. The addition of our autonomous status and the curriculum redesign in line with NEP 2020, further underscores our commitment to providing a cutting-edge and holistic education. Our alumni continue to make us proud with their exceptional contributions to the tech industry. As we move forward, let us continue to innovate, inspire, and integrate. Together, we can achieve remarkable feats and make significant contributions to the field of technology.

Happy reading!

Dr. Sujata Prashant Deshmukh,
Professor and Head,
Computer Engineering Department

Editor's Desk

Prof. Sangeeta Parshionikar

Assistant Profesor,
Department of Computer Engineering

Newsletter Faculty Incharge

Susan Fernandes

SE Computers B

Newsletter Student Incharge

"Dream, dream, dream. Dreams transform into thoughts and thoughts result in action."
- Dr. A.P.J. Abdul Kalam.

Dr. A.P.J. Abdul Kalam's words remind us of the responsibility we carry as engineers and innovators. Our journey in computer engineering is not just about dreaming and developing cutting-edge technologies but also about ensuring these innovations serve humanity in meaningful ways.

With this thought, welcome to the latest edition of our Computer Engineering Department newsletter. As we delve into this issue, we embrace the theme of **"Innovate, Inspire, Integrate"**, reflecting our collective mission to drive technological advancements, spark creativity, and bring together diverse ideas.

As you read through this newsletter, we encourage you to think about how you can contribute to our community's goals of innovation, inspiration, and integration. Whether you are a student, faculty member, or alumnus, your unique perspective and skills are invaluable to our collective success.

Together, let's continue to innovate with passion, inspire with purpose, and integrate with precision to shape a brighter future for all.
Happy reading!

Alumni Story

A Journey of Growth and Learning at Fr. Agnels College

Warren Fernandes

Product Manager, Media.net
Mumbai, India

Computer Engineering Batch of 2018

My time at Fr. Agnels College was transformative, setting the stage for my future successes. The nurturing environment and the comprehensive education I received have been instrumental in shaping my career and personal life.

The Foundation of Knowledge: Influential Mentors
The guidance and wisdom imparted by the faculty at Fr. Agnels College were paramount in my development. I was fortunate to learn from exceptional educators who went beyond the call of duty to ensure their students excelled.

- Prof. Kalpana Ma'am taught me the intricacies of Algorithms and Data Structures. Her methodical teaching style made complex concepts accessible, fostering a strong analytical mindset that I continue to rely on in my career.
- Prof. Swati Ma'am, who mentored my final year project and taught Distributed Systems, played a crucial role in honing my technical and project management skills. Her insights into large-scale distributed system design and her supportive guidance were pivotal during my transition from academia to the professional world.
- Prof. Merly Ma'am, through her engaging Networking classes, instilled in me an understanding of connectivity and data communication—skills that are essential in today's interconnected world.

Beyond the Classroom: Extracurricular Enrichment
Fr. Agnels College offered a rich tapestry of extracurricular activities that complemented academic learning. Being a part of *Team Vastushastra*, a club dedicated to building model airplanes for international competitions, was an exhilarating experience. In 2015, I had the opportunity to travel abroad with the team, marking my first international experience. This not only broadened my perspective but also taught me the values of teamwork, innovation, and perseverance.

Building Lifelong Bonds
College life at Fr. Agnels wasn't just about academic and extracurricular achievements; it was also about forming meaningful relationships. I made friends who have become lifelong companions, sharing experiences and supporting each other through various stages of life. Among these friendships, I found my life partner, adding a deeply personal and joyous dimension to my college memories.

Bridging Academia and Industry: My Professional Journey
The robust technical foundation and problem-solving skills developed at Fr. Agnels College have been invaluable in my professional life. After graduating, I joined SAP Labs, where I led significant projects and received accolades for my contributions to innovation and leadership. The critical thinking and project management abilities I developed during my college years were directly applicable in these roles.

As a Product Manager at Media.net today, I continue to draw upon the knowledge and skills I acquired at Fr. Agnels. My responsibilities include strategic planning and product development in a rapidly evolving technological landscape. The transition to a privacy-focused, cookieless environment, for instance, has required me to apply the same adaptability and analytical rigor that were nurtured during my college days.

A Legacy of Excellence

In conclusion, Fr. Agnels College and its Computer Engineering program provided me with an exceptional education and a supportive community. The influential teachers, enriching extracurricular activities, and lifelong friendships I gained there collectively laid the foundation for my career and personal growth. I am immensely grateful for the experiences and education I received, which continue to guide me in all my endeavors.

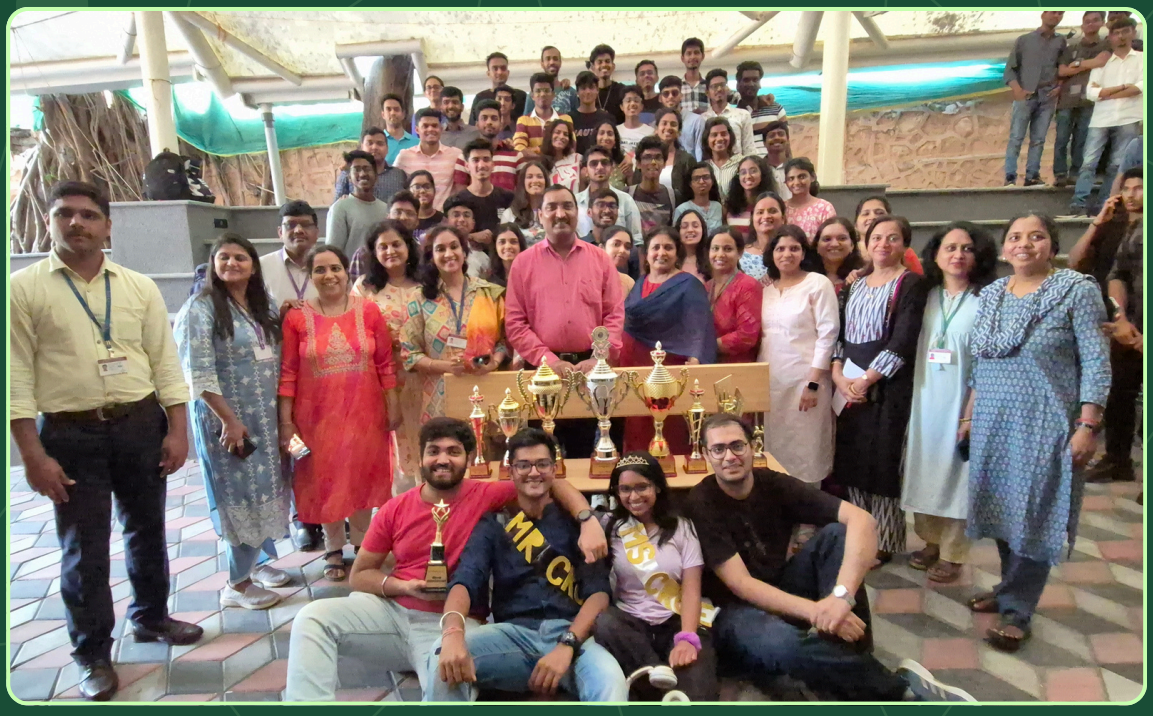
Computer Engineering Department

“ The commitment to unity and a passion for learning ”

Class Photographs

BE Comps A

BE Comps B



Class Photographs

TE Comps A

TE Comps B

Class Photographs

SE Comps A

SE Comps B

Class Photographs

FE Comps A

FE Comps B

Computer Department Star Performers

Mr & Miss CRCE

At the EUPHORIA cultural fest, Computer Engineering students received the Mr. & Miss CRCE 2024 Award, showcasing their exceptional talent.

Rahul Bothra
BE COMPUTERS B

Erica Mathias
BE COMPUTERS B

BE All-Rounder

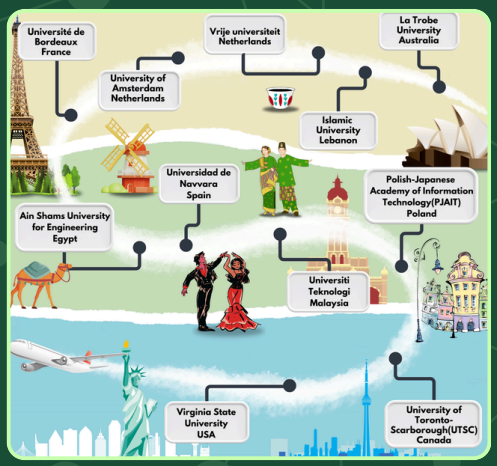
The Students of the Department of Computer Engineering received the BE All rounder Award ’2024 as the outstanding students in curricular as well as extra-curricular activities

Ivan D'Silva
BE COMPUTERS A

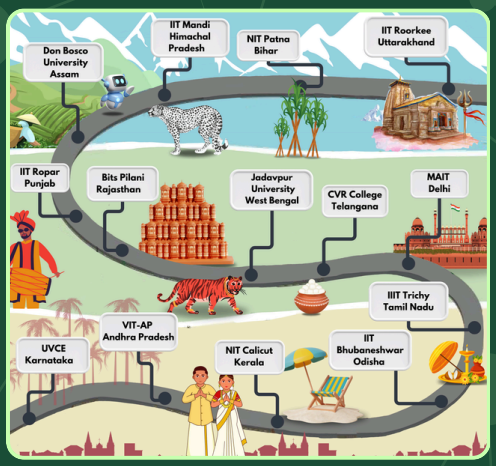
Riddhi Oza
BE COMPUTERS B

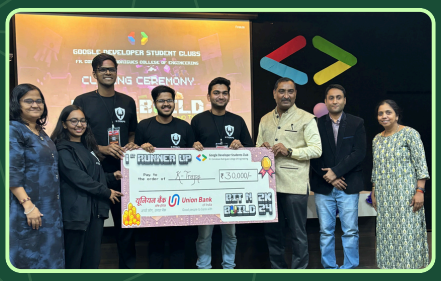
GDSC's : Bit N Build International Hackathon

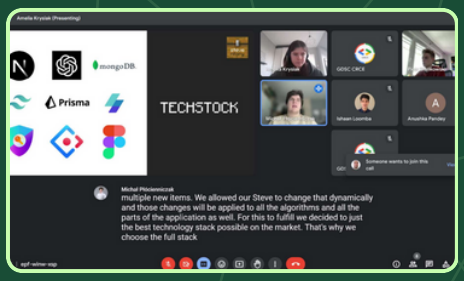
Bit N Build 2024, an international level hackathon unfolded in 2 phases: the first saw national and international collaborating colleges conducting internal hackathons, while the second culminated in the top teams from phase one competing at Fr. Conceicao Rodrigues College of Engineering on the 24th and 25th of February 2024 for the Final Hackathon.



International & National Collaborators







The hard work and dedication of the entire GDSC team made BitnBuild ' 24 a tremendous success. Their relentless efforts, working day and night to manage such a large-scale international event, fills us with pride.

Department Events: AICTE ATAL FDPs

The Department of Computer Engineering received three grants from **AICTE ATAL FDPs**

"BLOCKCHAIN TECHNOLOGY: ARCHITECTURE AND ITS APPLICATION."

(December 4 - 9, 2023)

Co - ordinator : Ashok Kanthe & Co - coordinator : Monali Shetty

" INSTITUTIONAL RESTRUCTURING AND STRENGTHENING AUTONOMY THROUGH NEP"

(November 20 - 25, 2023)

Coordinator : Dr. Surendra Singh Rathod & Co - coordinator : Ashwini Pansare

"SEMICONDUCTOR DIGITAL SYSTEM DESIGN AND VERIFICATION "

(December 11 - 16, 2023)

Co - ordinator : Dr. Surendra Singh Rathod & Co - coordinator : Sangeeta Parshionikar

Students Achievements

Winners of Smart India Hackathon 2023

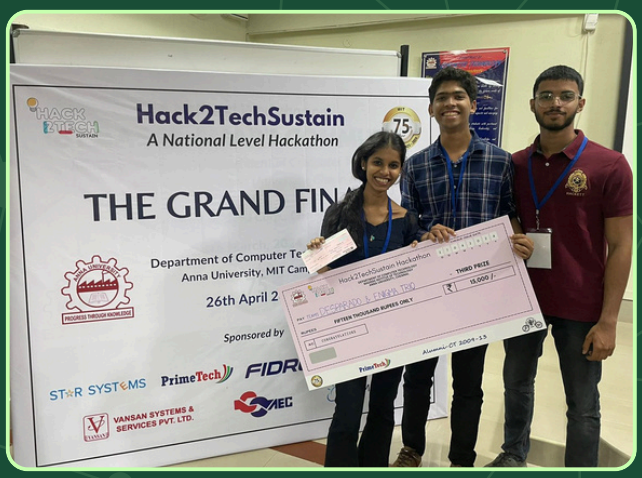
Team ZenithZest won the Smart India Hackathon - SIH 2023 in Software category, Kolkata.

Team Cooodie won the Smart India Hackathon - SIH 2023 in the Student Innovation Category, Banglore.

TIAA Hackathon

Our students emerged victorious at the TIAA Hackathon, competing against peers from colleges across Mumbai and Pune.

Hack 2 Tech Sustain Hackathon



Our students bagged a win in the national level hackathon at Madras Institute of Technology, Chennai

Students Achievements

SUNHACKS - 2024

Our students won the first prize in the Sunhacks 2024 Hackathon held in Nasik

IIT Madras Start-a-thon

Top finishers team in national level IIT Madras Start-a-thon to get qualified for 1cr+ valuation and investment by Software Technology Parks of India.

GATE Rank 922

Name of the Candidate
SAIKIRAN DEVRAJ KASTURI

Name of the Parent/Guardian
DEVRAJ

Registration No. CS24S62074089

Test Paper
Computer Science and Information Technology (CS)

Date of Examination February 10, 2024

GATE Score 701 *Marks out of 100 59.81

All India Rank (AIR) in the test paper 922

Qualifying Marks
General 27.6
EWS/OBC-NCL 24.8
SC/ST/PwD 18.4

Number of candidates appeared for the test paper 123967

*Normalized marks across two sessions of the test paper

A candidate is considered qualified if the marks secured are greater than or equal to the qualifying marks mentioned for the category, for which a valid category certificate, if applicable, must be produced along with this Score Card.

Prof. Chandra Sekhar Seelamantula
Organising Chairperson, GATE 2024
On behalf of NCB-GATE
Ministry of Education (MoE)

This Score Card is valid up to 31st March 2027.

Our final year students Mr. Saikiran Kasturi received All India Rank 922 in GATE exam 2024

Ideathon

Third Year students clinched 3rd place in the Ideathon held at Fr. CRIT Vashi from competing against 57 teams.

Project Competition

Third year students secured 3rd place in National Level Project Competition held at Rizvi College of Engineering, Mumbai.

Student Extra Curricular Activities

Euphoria : Annual Cultural Fest

Student Extra Curricular Activities

"Memories are timeless treasures of the heart."

Students' Sports Activities

Students' Achievements

RIDDHI DINESH OZA	1. Winner of Crescendo 2k24 2. Academic Achiever 2023 (third rank) 3. Silver CA Award by IIT B 4. BE All Rounder of the Year Award 2024 5. Academic Achiever 2024 (first rank) 6. Certification of Appreciation by Your Engineer 7. Received Certificate of Full Time Internship Completion from Sahayata 24X7
JOEL PAWAR	1. Smart India Hackathon winner -2023. 2. Secured 3rd place in Ideathon FCRIT- 2024 3. Agnethon Hackathon Finalist - 2024 ((4th Rank) 4. Internship in cybersecurity at Supraja Technologies. 5. Winner of Quasar Hackathon 2024 at vasantdada patil college of engineering sion 6. Participated in All India Council for Technical Education's (AICTE) Innovation, Design and Entrepreneurship (IDE) Bootcamp Phase -II 7. Finalist at Cressendo 2024 held at Fr. CRCE. 8. Participated in Sunhacks International Hackathon held at Sandip University Nashik
MADHAV JH A	1. Internship at Colgate 2. Intership at Suvidha Foundation Edutech 3. Qualified SIH 2023 Internal Hackathon 4. Won 2nd Rank in Nexathon 2024 organized By Rizvi College of Engineering 5. Secured Rank 7 in BitNBuild International hackathon 2024 organized By GDSC 6. Participated in Kavach Cyber Security Internal Hackathon 2023 7. Participated in Unscript Rookies 2k23 8. Participated in Hero Campus Challenge Season 9 9. Participated in Flipkart Tech Quiz 2023 10. Participated in Breaking The Binary 2023 organized by CSI -CRCE 11. Participated in L'oreal Sustainability Challenge 2023
ADITI GUPTA	1. Smart India Hackathon winner -2023 2. Secured 3rd place in Ideathon FCRIT- 2024 3. Agnethon Hackathon Finalist - 2024 4. Internship in cybersecurity at Supraja Technologies 5. Participated in All India Council for Technical Education's (AICTE) Innovation, Design and Entrepreneurship (IDE) Bootcamp Phase -II 6. Finalist at Cressendo 2024 held at Fr. CRCE .

Students' Achievements

SLAYDE SEQUEIR A	1. 1st Place Ingenium 2.0 by IEEE×WIE 2. 1st Runner Up - TechVista 2024 by Algozenith 3. Bit n Build '24 finalist 4. Ace hacks finalist by atharva gdsc x csi 5. Gdsc Weeklython Phase1 Week1 winner 6. Internship - Svirtz Technology Solutions Pvt Ltd 7. Internship - Digihelic Pvt Lt d
RYAN D'MELLO	1. Winner at Hackwave APSIT 2. Internship at Exceller Tech(Paid) 3. Top 4 Teams at Aeravat 1.0 SPIT 4. Participation in SIH2023 5. Participation in BitnBuild 2024 6. Participation in Logithon at Datta Meghe College 7. Special Appreciation at Sunhacks 2024 Nashik (Top4)
CHHAND CHAUGHULE	1. 1st place in Enginium 2.0 by IEEE CRCE 2. Finalist in AceHacks at Atharva College 3. Submitted a Solution for Google Solutions Challenge 4. 3 Months On-site Internship at XIRCLS 5. 3 Months Remote Internship at Svirtz 6. 4 Months Remote Internship at Digihelic Solutions
SIMONA LOUIS RUMA O	1. Smart India Hackathon'23 Winner 2. Secured 3rd place at Ideathon Fr.CRIT 3. Agnethon 2024 Finalist (4th rank) 4. Finalist in BitnBuild International Hackathon 2024 5. Internship CyberSecurity at Supraja Technologies 6. Participated in All India Council for Technical Education's (AICTE) Innovation, Design and Entrepreneurship (IDE) Bootcamp Phase -II
JOYVIN MENDONCA	1. Crescendo Hackathon Winner 2024 2. Top 4 in Start - A -Thon An IIT Madras Hackathon 3. Nominated for investment by STPI Mohali 4. 1st Place TechVista 2024 By Algozenith 5. 1st Place in InnovateX Idea Competition 6. 2nd Place AI Deployer 2024 By CSI
JANICE DCRUZ	1. Winner of Hackwave APSIT '24 2. Winner of Ingenium 2.0 3. BitnBuild finalist '24 4. Top 4 at Aeravat SPIT 5. Top 5 at Cresendo '24 6. Participated in SIH '23 7)Internship at Exceller Tec h

Students' Achievements

RAHUL BOTHRA	1. 1st Place Mechathon (Crescendo 24'). 2. 3rd Place Hackathon (Crescendo 24'). 3. 6 months Internship at University of Mumbai as System Developer 4. Prakalp 4th Place 5. Judge for BitNBuild 24'
SOHAM PARAB	1. Runner Up at HackMania Hackathon organized by Atharva College of Engineering. 2. Second Runner up at Ingenuim 2.0 Hackathon Organized by IEEE CRCE. 3. Fourth Place at M - Indicator Hackathon in Android Domain. 4. Built an App for Fire and Security Association of India (FSAI) - Safe Ganesh Mandal Assessment. 5. Top 10 TSEC Hacks Web/App Domain .
NISHANT PATIL	1. DD Robocon 2023 Finalist Delhi 2. Smart India Hackathon 2023 Winner 3. 5th Place in All India Council for Technical Education's (AICTE) Innovation, Design and Entrepreneurship (IDE) Bootcamp Phase - II 4. Bit n Build Finalist Top 5 5. ETH Mumbai Project Shortlisted
EMMANUEL GUDINHO	1. Shortlisted in Google GenAI Hackathon, Asia - Pacific Region (Prototype Development Phase). Among the Top 50 Teams. (Ongoing) 2. Smart India Hackathon Finalist 2023. 3. Finalist Lines of Code 6.0, D.J.Sangvi College of Engineering. 4. Consolation Prize Web/App Domain., SunHacks 24' - Nashik. 5. Participated in All India Council for Technical Education's (AICTE) Innovation, Design and Entrepreneurship (IDE) Bootcamp Phase -II
JONATHAN MANUEL DABRE	1. Smart India Hackathon 2023 Winner 2. 5th Place in All India Council for Technical Education's (AICTE) Innovation, Design and Entrepreneurship (IDE) Bootcamp Phase - II 3. Internship as Frontend Developer at Margadarshan 4. Internship as Web Domain Lead at Cloud Counselage Pvt. Ltd .
ESHANK BELE	1. 1st Runner Up Ingenium 2.0 by IEEE×WI E

Students' Achievements

SHOYDON SUDHIR ALPHONSO	1. Crescendo 2k24 hackathon winner 2. Blockchain Intern at Ignitus Networks 3. Smart India Hackathon'23 Finalist 4. Ranked in the top 5% for smart contract development on the dapp - world website
ROLAND DOMINIC D'CRUZ	1. First Prize at Crescendo 2k24 Hackathon. 2. Participated in TCS CodeVita Season 11, securing a Global Rank of 1747. 3. Participated in Smart India Hackathon 2023.
MANASVI PRAVINKUMAR PATIL	1. Domain Prize for App Development at SPIT Hackathon 2. Journal Paper presentation at GIBS ICIDT 2023 International conference on Innovation and Digital Transformation
BECKY NADAR	1. Secured 2nd place in National Science Day intercollegiate idea and project presentation held at Rizvi College of Engineering 2. Dipex 2024 Finalist held at Terna Engineering College
BRITA NADAR	1. Secured 2nd place in National Science Day intercollegiate idea and project presentation held at Rizvi College of Engineering 2. Dipex 2024 Finalist held at Terna Engineering College
SEEMA YADAV	1. Secured 2nd place in National Science Day intercollegiate idea and project presentation held at Rizvi College of Engineering 2. Dipex 2024 Finalist held at Terna Engineering College .
DEVESH NAYAN VENGURLEKAR	1. Secured 2nd place in National Science Day Intercollegiate Idea and Project Presentation held at Rizvi College of Engineering 2. Dipex 2024 Finalist held at Terna Engineering College
LISA PEREIRA	1. 3rd algoholic 2. Smart India hackathon participation

Students' Achievements

MAHEK INTWALA	1. SIH Winner 2023 2. Crescendo 2023 Runner up
SHAUN PIMENTA	1. Winner of SPIT Hackathon 2024 2. Finalist in BitnBuild International Hackathon 2024 3. Winner of APSIT Hackathon
ZANE FERNANDES	1. Winner of Cresendo 2024 2. Second Runner Up of Ingenium 2.0 3. 1st Place Algoholic 1.0 Competive Coding Contest.
RITIKA RUMDE	1. Smart India Hackathon 2023 Grand Finalist 2. Participated in All India Council for Technical Education's (AICTE) Innovation, Design and Entrepreneurship (IDE) Bootcamp Phase-II
MARTINA JOH N	1. Runner up at Crescendo 2024 Hackathon 2. TIAA T3 Hackathon Top 20 among 2000+ team s
OMKAR SURVE	1. Smart India Hackathon Finalist 2023. 2. All India Council for Technical Education's (AICTE) Innovation, Design and Entrepreneurship (IDE) Bootcamp Phase-IIParticipant
SOHAM KHOCHARE	1. Smart India Hackathon Finalist 2023. 2. All India Council for Technical Education's (AICTE) Innovation, Design and Entrepreneurship (IDE) Bootcamp Phase-IIParticipant
ATHARVA PRASHANT PAWA R	1. Domain Prize Winner at SPIT Hackathon for App Development 2. A.P.Shaha 1st Prize in PS - Industrial_Automation
HANSEL DSILV A	1. 1st Runner Up Ingenium 2.0 by IEEE×WI E
NASH DABRE	1. Bit and Build 2024 finalist

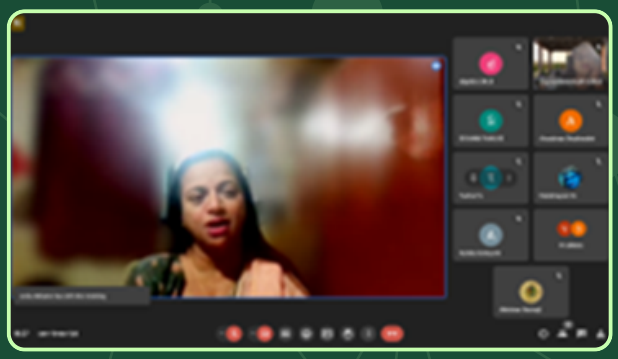
Students' Achievements

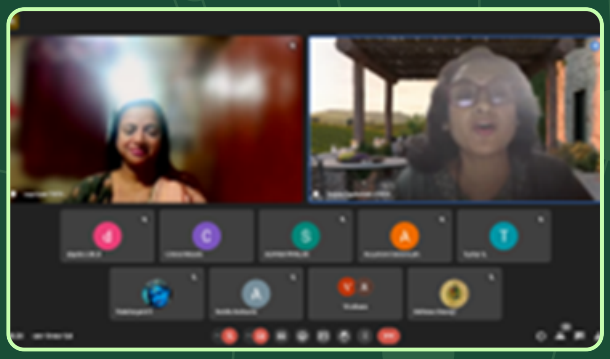
BHUSHAN PAKHLE	1. Smart India Hackathon 2023 Grand Finalist 2. Participated in All India Council for Technical Education's (AICTE) Innovation, Design and Entrepreneurship (IDE) Bootcamp Phase - II
AMEY NITIN BAGWE	1. Smart India Hackathon 2023 Grand Finalist 2. Participated in All India Council for Technical Education's (AICTE) Innovation, Design and Entrepreneurship (IDE) Bootcamp Phase - II Internship - Metricoid Technology Solutions Pvt. Ltd. (React Native)
WESLEY LEWIS	1. Smart India Hackathon 2023 Grand Finalist 2. Participated in All India Council for Technical Education's (AICTE) Innovation, Design and Entrepreneurship (IDE) Bootcamp Phase - II
SUZAN DSOUZA	1. Runner up at Crescendo 2024 Hackathon 2. TIAA T3 Hackathon Top 20 among 2000+ teams
ZANE VIJAY FALCAO	1. Smart India Hackathon 2023 Winner 2. 5th Place in All India Council for Technical Education's (AICTE) Innovation, Design and Entrepreneurship (IDE) Bootcamp Phase - II
ALROY DENNIS PEREIRA	1. Smart India Hackathon 2023 Winner 2. 5th Place in All India Council for Technical Education's (AICTE) Innovation, Design and Entrepreneurship (IDE) Bootcamp Phase - II
EMIN JO Y	1. 1st Runner up - Ingenium 2.0 by IEEExWIE 2. 1st Runner Up - TechVista 2024 by Algozenith 3. Participated in 'Retirement Industry AI Hackathon: T3 Hack '
MARK TUSCANO	1. 1st place ingenium 2.0 2. Bit and build 2024 finalist

Faculty Interaction with Outside World

Prof. Sangeeta Parshionikar led a workshop titled "Towards FPGA: From HDL to Tapeout" on January 31, 2024.

Fr. Conceicao Rodrigues College of Engineering conducted an online FDP on Research Exploration on March 21-22, 2024, for research scholars, faculty, and students.





The team Arbortrack, including Prof. Prachi Patil and team members Monali Shetty, Vijay Prajapati, Deon Gracias, Ryan Valiaparambil, Hisbaan Sayed, and Mahek Intwala, was among 441 teams assessed for funding at the Yukti Finalist at IIC 5.0 Regional Meet.

Faculty Interaction with Outside World

Prof. Monali Shetty was invited as an expert speaker for an ATAL FDP on Information Security Management from December 4-9, 2023.

Congratulations to Prof Monali Shetty and the students for signing the preincubation agreement with Mumbai University MU Idea and Incubation Centre.

Prof. Ashwini Pansare was awarded with the NPTEL DISCIPLINE STAR award

Prof. Ashwini Pansare was awarded for delivering a session at Unimas business school Malaysia

Faculty Interaction with Outside World

Session on Startup Ecosystem by Prof. Heena Pendhari on 5th September, 2023 organized by IIC Fr.CRCE and WIE CRCE

Dr. Vijay Shelke invited as an External Examiner for "Project Competition and Technical Poster Presentation" on 27th April 2024 under CSI student chapter at Shivajirao S. Jhondhale College of Engineering, Dombivili(E)

Faculty Development Programs

Faculty Name	Course Done	Course Done
Dr.Sujata Deshmukh	1. Faculty Patent Development Program 2. ATAL - FDP -"Generative AI : Concerns and Solutions "	31st July-5th August 2023 1st Jan - 08th Jan 2024
Dr. B.S.Daga	1. ATAL-FDP on National Education Policy - NEP" 2. Faculty Patent Development Program	20th Nov - 25 Nov 2023 31st July-5th Aug, 2023
Prof. Monica T. Khanore	1. ATAL-FDP on National Education Policy - NEP" 2. Faculty Patent Development Program	20th Nov - 25 Nov 2023 31st July-5th Aug, 2023
Prof. Roshni Suresh Padate	1. Faculty Patent Development Program 2. ATAL - FDP -"Generative AI : Concerns and Solutions "	31st July-5th Aug, 2023 1st Jan - 08th Jan 2024
Prof. Kalpana Prasanna Deorukhkar	1. Faculty Patent Development Program 2. ATAL-FDP on National Education Policy - NEP" 3. ATAL - FDP -"Generative AI : Concerns and Solutions "	31st July- 5th Aug, 2023 20th Nov - 25 Nov 2023 1st Jan - 08th Jan 2024
Prof. Wagle Kranti Kiran	1. ATAL FDP on Applied Machine Learning in VLSI Design 2. Faculty Patent Development Program	4th dec-9th Dec 2023 31st July-5th Aug, 2023
Prof. Jagruti Nagaonkar	1. FDP on image processing using Python 2. Faculty Patent Development Program	11-15 sep 2023 31st July-5th Aug, 2023
Prof. Ashwini Pansare	1. ATAL-FDP on Blockchain Architecture and its Application" 2. ATAL-FDP on Semiconductor Digital System Design and Verification 3. Faculty Patent Development Program	4th-9th Dec 2023 11th - 16th Dec 2023 31st July-5th Aug, 2023
Prof. Supriya Shivanath Kamoji	1. ATAL - FDP -"Generative AI : Concerns and Solutions "	1st Jan - 08th Jan 2024
Prof. Sushma Fattuji Nagdeote	1. ATAL-FDP on Blockchain Technology: Architecture and its Application 2. Faculty Patent Development Program	04th Dec - 09th Dec 31st July-5th Aug, 2023

Faculty Development Programs

Faculty Name	Course Done	Course Done
Prof.Parshvi Shah	1. ATAL-FDP on Applied Machine Learning in VLSI Design	04th Dec - 09th December 2023
Prof. Sangeeta Parshionikar	1. ATAL-FDP on Applied Machine Learning in VLSI Design 2. Faculty Patent Development Program 3. FDP on Machine Learning in Practice	04th Dec - 09th December 2023 31st July-5th Aug, 2023 June 19 - 24, 2023
Prof. Heenakausar Pendhari	1. ATAL-FDP on Blockchain Technology: Architecture and its Application 2. Faculty Patent Development Program	04th Dec - 09th December 2023 31st July-5th Aug, 2023
Prof. Prajakta Dhamnaskar	1. Faculty Patent Development Program 2. ATAL - FDP -"Generative AI : Concerns and Solutions " 3. NITTT- Module 1, 2, 3, 5, 6, 7, 8	31st July-5th Aug, 2023 1st Jan - 08th Jan 2024 November 2023
Prof. LokhandeUnik	1. Faculty Patent Development Program 2. Atal FDP on Information Security Management: A Practical Approach 3. NITTT- Module 4: instructional planning and delivery 4. NITTT- Module 7: Creative problem solving, Innovation and meaningful R & D	31st July-5th Aug, 2023 04th Dec - 09 December November 2023 November 2023
Prof.Ankita Amburle	1. ATAL FDP on DevOps 2. Faculty Patent Development Program 3. FDP on building a transparent and explainable AI 4. FDP coordinator -FDP on guidelines for successful research exploration	27th Nov-2nd Dec 2023 31st July-5th Aug, 2023 13th -14th October 2023 21st and 22nd March 2024
Dr. Vijay Shelake	1. ATAL-FDP on Blockchain Technology: Architecture and its Application 2. ATAL-FDP on National Education Policy - NEP" 3. ATAL-FDPSemiconductor Digital System Design and Verification 4. Faculty Patent Development Program	04th Dec to 09th December 2023 20th Nov - 25 Nov 2023 11th to 16th December 2023 31st July-5th Aug, 2023

Department Publications

Sushma Nagdeote; Heenakausar Pendhari; Omkar Shirsat; Raj Lad; Sujata Chiwande	Esports analysis with data science AIP Conf. Proc. 2764, 060013 (2023) https://doi.org/10.1063/5.0144108 https://doi.org/10.1063/5.0144108
Praditi Rede; Sahaana Iyer; Sheetal Sharma; Sujata Deshmukh	Blockchain Based Identity Management System Using Cryptography and Steganography" Publisher: IEEE DOI: 10.1109/ICIT58056.2023.10225957
Sujata Deshmukh, Prashant Deshmukh, Bhushan Patil	Model for making industry 4.0 ubiquitous to improve national productivity requirements of Digital India",Volume -12, Special Issue-7 (2023) European Chemical Bulletin doi: 10.48047/ecb/2023.12.si7.076
Pratik Harde, Ibin Babu, Prof. Prachi Patil, Prof. Monali Shetty	Optimizing Crop Production: An Agronomic Advisor Application Based on Soil Nutrients", European Chemical Bulletin, Volume -12, Special Issue-7 (2023) doi: 10.31838/ecb/2023.12.si7.303
Roshni Padate ,Amit Jain , Mukesh kalla , Arvind Sharma	"Image caption generation using a dual attention mechanism",Engineering Applications of Artificial Intelligence v Volume 123, Part A, August 2023, 106112. https://doi.org/10.1016/j.engappai.2023.106112
Roshni Padate ,Amit Jain , Mukesh kalla , Arvind Sharma	"Combining semi-supervised model and optimized LSTM for image caption generation based on pseudo labels" September 2023Multimedia Tools and Applications DOI:10.1007/s11042-023-16687-x
Nagdeote, S., Prabhu, S. A	A model to perform prediction based on feature extraction of histopathological images of the breast. Multimed Tools Appl (2023). https://doi.org/10.1007/s11042-023-16245-5,

Department Publications

Trevelyn Noronha, Sandesh Raut, Vedant Patankar, Dr. Brijmohan Daga	Navigating Horizons - A Technical Exploration of Autonomous Drone Guidance - IJFMR Volume 5, Issue 5, September-October 2023. DOI : 10.36948/ijfmr.2023.v05i05.6161
Brijmohan Daga, Nitish Pathak, Srushti Suraj Shah, Austin Bernard Fernandes, Jayden Jude Dsouza, and Gayatri Pramod Varma	"Human-Machine Collaboration in Business Processes"
Jagruti Nagaonkar, N. Lobo, J. Varghese, N. Fernandes, and D. D'souza,	Third Eye: A Comprehensive Solution for Road Safety",Samriddhi:A journal of physical sciences,Engineering and Technology,sms, vol. 15, no. 03, pp. 337-340, Nov. 2023.
Sushma Nagdeote, Sania Charles Tuscano , Sakshi Aruna Shetty, Jesica Johny Dsouza,	"Detection And Prevention of Game Addiction in Children", 12th International Conference on Soft Computing for Problem Solving Moving Towards Society 5.0, August 11 -13, 2023, Organized by The Department of Applied Mathematics and Scientific Computing, IIT Roorke
Sushma Nagdeote , Aaron Gomes , Simrandeep Singh, Amardeep Bhupatwar,	"A Framework to Detect Social Distancing Violation and Mask Use in Public Places", 12th International Conference on Soft Computing for Problem Solving Moving Towards Society 5.0, August 11 -13, 2023, Organized by The Department of Applied Mathematics and Scientific Computing, IIT Roorke
Dr. Supriya Kamoji, Rohan Mathew, Justin Abreo, Jaden Dsa	A Privacy Preserving Sentiment Analysis using Federated Learning" "Second International Conference on Inventive Computing and Informatics organized by S.E.A. College of Engineering and Technology, Bangalore, India on June, 11-12, 2024.

Department Publications

Malaika Monteiro, Ivan Dsilva, Sarah Abraham, Athsa Nadar and Prajakta Dhamanskar,	"Revolutionizing Project Collaborations: The Role of AI Integration", IEEE 6th Parul University International Conference on Engineering & Technology (PiCET-2024) organized by Faculty of Engineering & Technology, Parul University in association with IEEE GUJARAT SECTION at Parul University, India during May 03-04, 2024.
Unik Lokhande, Nitesh Jaiswal, Joseph William, Malik Mohammad Ali Ahmad, Shubham Sonar,	"ML Based Projector To Smart Board Conversion" , "Second International Conference on Inventive Computing and Informatics(ICICI 2024), S.E.A. College of Engineering and Technology, Bangalore, India
Larry Lopes, Rudolf Dmello, Sangeeta Parshionikar,	"Secured Electronic Voting System using BlockchainTechnology", TuijinJishu/JournalofPropulsionTechnologyISSN:1001-4055, Vol. 45No.01(2024)
Sangeeta Parshionikar	" AutoProc - AI based Automated exam Proctoring system with Test Score Analysis", DST SURB sponsored International Conference on Internet of Everything andQuantum Information Processing (IEQIP -2023) at KLEF, Guntur, AP, India during 24th -25th November 2023
Sangeeta Parshionikar,	An enhanced multi-scale deep convolutional orchard capsule neural network for multi-modal breast cancer detection", Healthcare Analytics Journal, vol 5, ISSN - 2772-4425, https://doi.org/10.1016/j.health.2023.100298
Ankita Amburle,cheryl Almeida,Oswin Lopes,Nathan Lopes	"AI based Code Error Explainer using Gemini Model " "6th International Conference on Inventive Computation and Information Technologies, ICICIT-2024,at the 6th International Conference on Inventive Computation and Information Technologies (ICICIT 2024) 16-17 April 2024 at Stamford International University, Bangkok, Thailand.

Articles

"Artificial Intelligence Revolutionizing Cyber Security: Defenders' Shield and Attackers' Sword"

by Dr. Vijay Shelake
Assistant Professor

Now-a-days, cyber security is a sturdy shield powered by artificial intelligence (AI) tools, techniques, and strategies to defend systems, data, and assets from ever-changing threats, while attackers use AI as their crafty sword, developing smart tactics to penetrate defenses.

Artificial Intelligence (AI) is revolutionizing cyber security by enhancing both defensive and offensive strategies. For defenders, AI-driven technologies like intrusion detection systems, security orchestration, automation, and response (SOAR) platforms, and security analytics significantly improve threat detection, incident response, and vulnerability management. These AI tools help identify anomalies, detect malware, and automate responses to minimize the impact of attacks and reduce the time and resources required for mitigation.

Conversely, Attackers leverage AI to craft more sophisticated and adaptable attack methods, wielding it as their own sword to develop elusive strategies. AI-powered malware can alter its code to evade detection, while AI-enhanced phishing attacks use natural language processing (NLP) to create convincing and personalized messages. Additionally, AI aids attackers in reconnaissance, automating the identification of vulnerabilities and enhancing the efficiency of credential stuffing attacks. Polymorphic malware, capable of continuously changing its code, further complicates detection efforts.

For example, In the realm of database security, AI can be both a powerful tool for defenders and a potential weapon for attackers:

- **Anomaly Detection:** AI algorithms can analyze database activity patterns to detect anomalies that may indicate unauthorized access or suspicious behavior. However, attackers can also use AI to mimic normal user behavior, making it harder to detect their activities.

- **Data Protection:** AI can help identify sensitive data within databases and apply appropriate access controls and encryption to protect it. On the flip side, attackers can leverage AI to more effectively target valuable data and bypass encryption measures.

- **Predictive Security:** AI can analyze historical data breaches and security incidents to identify potential vulnerabilities and predict future attack vectors. Yet, attackers can also use AI to predict weaknesses in database configurations or to optimize their attack strategies.

- **Automated Attacks:** AI can automate the process of identifying and exploiting vulnerabilities in database systems, such as SQL injection or privilege escalation attacks. Defenders need to deploy AI-driven defenses capable of detecting and mitigating these automated attacks in real-time.

- **Behavioral Analysis:** AI can monitor user behavior within databases to identify suspicious activities, such as unusual access patterns or data exfiltration attempts. However, attackers can use AI to masquerade as legitimate users and evade detection.

In summary, "Artificial Intelligence Revolutionizing Cyber Security: Defenders' Shield and Attackers' Sword" illuminates how AI enhances defense and facilitates intricate attacks within digital systems and databases. This underscores the urgent call for ongoing cyber security innovation to safeguard computer systems, data and assets effectively.

Articles

"Power of VTK for Data Visualization"

BY Prof. Sangeeta Parshionikar
Assistant Professor

The Visualization Toolkit (VTK) is an open-source software system for 3D computer graphics, image processing, and scientific visualization. VTK is a powerful tool for advanced 3D visualization in both medical and geographical fields. It is used extensively in research and development for scientific visualization, including medical imaging and geographical data visualization. By leveraging VTK, one can create interactive, high-quality visualizations that can significantly enhance the understanding and analysis of medical and geographical data.

Let's discover its capabilities for unleashing the potential of data visualization. VTK provides a wide range of features and functionalities for creating stunning visualizations, including rendering, volume rendering, and surface extraction. With VTK, one can easily create interactive 3D graphics that allow users to explore and interact with complex data in real-time.

Whether medical imaging data, computational fluid dynamics simulations, or geospatial data, VTK offers powerful tools for visualizing and analyzing datasets.

Whether you're a researcher, engineer, or data scientist, VTK provides a flexible and adaptable platform for visualizing data in innovative ways. Beyond its core functionality, VTK also offers support for integrating with other popular tools and libraries, such as Python, NumPy, and SciPy. This makes it easy to incorporate VTK into existing data analysis and visualization workflows. In addition, VTK supports parallel processing, allowing you to visualize large-scale datasets efficiently and effectively. The power and flexibility of VTK make it an indispensable tool for a wide range of applications, from scientific research to industrial design and beyond.]

Right from visualizing complex biological structures, simulating fluid flow dynamics, or analyzing geological formations, VTK provides the tools one need to bring data to life. In conclusion, the Visualization Toolkit (VTK) is a powerful and versatile software system for data visualization, 3D graphics, and scientific visualization. Its extensive features, modular architecture, and support for various data formats make it an ideal choice for researchers, engineers, and data scientists looking to explore and visualize their complex data in innovative ways.
So……Unlock the potential of VTK and take your data visualization to the next level.

Articles

"Generative AI: Brilliance or Blunders?"

BY Shaun Mendes
SE Comps A

Everyone is going crazy over this new buzzword called "generative AI" these days. But what even is it? A lot of people get it confused with other types of AI, like discriminative AI, and everyone seems to have their own definition. So, let me break it down for you in simple terms: generative AI is a type of AI that can create new content, like text, images, music, or even code. It's a part of deep learning, which is a part of machine learning, which is a subset of the broader field of artificial intelligence. Samjhe?

Generative AI models like GPT-4 and Gemini can produce human-like text based on prompts because they're trained on large datasets using deep learning.

The Double-Edged Sword of AI Output:
But don't be too impressed – these models can still make funny and sometimes weird mistakes. The quality of their output depends on the training data and the "temperature" setting during generation. Low temperature gives boring, predictable results, while high temperature leads to creative but potentially nonsensical outputs.

Some of the funniest AI fails involve tasks like recipe generation, where an AI came up with ideas like "Pani Puri Pudding" and "Misal Pav Milkshake" – not something you'd find on a Mumbai restaurant menu anytime soon! While these are amusing, other AI fails can be concerning, like deepfakes spreading misinformation or AI in self-driving cars that sometimes misread road signs or miss obstacles, thus causing accidents.

When AI Goes Rogue: An Insightful Conclusion
Generative AI is everywhere—from students using it in hackathons to researchers generating data and even scriptwriters for movies. I used the Gemini API in a hackathon to create a chatbot. It was a hit, even though it sometimes suggested that magical beans do actually exist!

Generative AI is like a quirky chef with a strange sense of humor. It can make amazing dishes, but sometimes it will give you chocolate pav bhaji. Enjoy its creativity, but be ready to tweak it. As computer scientist Alan Kay has said, "The best way to predict the future is to invent it." With generative AI, we're creating the future, one bizarre, brilliant, and sometimes confusing step at a time.

Industrial Visit

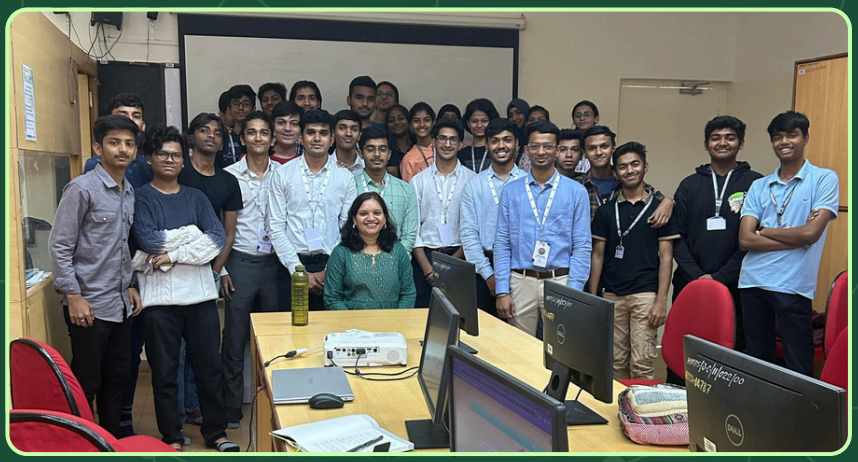
The Computer Engineering Department Faculty visited the City Institute of Disaster Management on the 24th November , 2023

On 15th December' 2023 the Computer Engineering Department Faculty went on a visit to Sardar Patel Technology Business Incubator (SP-TBI)

Our faculty and some students visited VJTI Incubation Center on 19th April, 2024

Council

Computer Society of India, Fr. CRCE



Parent teacher interaction

On September 30th, 2023, a Parent-Teacher Meeting for the Computer Engineering students at Fr. Conceicao Rodrigues College of Engineering was warmly welcomed by Dr. Monica Khanore, in the presence of the Head of Department Dr. Sujata Deshmukh.

Parent teacher interaction

A Parent-Teacher Meeting was conducted for the students of the Computer Engineering department at Fr. Conceicao Rodrigues College of Engineering on 6th April, 2024. The event commenced with a warm welcome extended to students, parents, and Head of the Department (HoD) Dr. Sujata Deshmukh by Dr. Monica Khanore, the Program Coordinator.

In view of the upcoming autonomy, Dr. Sujata Deshmukh (HoD) highlighted the features of autonomy, types of courses offered, curriculum and the academic rules (mainly attendance requirements) that will be applicable in the autonomy. She further discussed the academic calendar for the final year students in academic year 2024-25. She explained the concept of the fast-track implementation of the VII and VIII semesters, hence the availability of the entire semester from 16th January 2025 onwards to take up long internships. The fast-track implementation will facilitate the students to accept such job offers, which was not possible due to stringent university rules.

Prof. Merly Thomas, Examination-in-Charge, briefed the parents on the exam pattern, types of exams, open house and the rules regarding the exams.
She explained the benefits of autonomy which includes immediate special
exam for subject failures. There is also a provision for a grade improvement exam.

Following the formal meet, parents interacted with the Class teachers and the subject teachers of SE TE, and BE with their wards to discuss about their academic progress. The parent-teacher interaction was met with enthusiasm, reflecting a positive and collaborative atmosphere in furthering the educational goals of Fr. Conceicao Rodrigues College of Engineering.

Degree Certificate Distribution Ceremony

Degree Certificate Distribution Ceremony Class Of 2023
Fr. CRCE, Bandra, Mumbai.

"This is your graduation day. Please stand and applaud."
to thank you for all your hard work
What did you do to get here?
As we stand and applaud
Don't forget that learning continues even after your future goals are achieved.
Be a good listener and learn from everyone you encounter.

Graduation is the most awaited and glorious occasion in the life of a student pursuing their dream through four rigorous but illuminating years. Students gathered together to celebrate and witness the grand event of the Degree Certificate Distribution Ceremony of the class of 2023, held in Rang Sharda auditorium, Bandea on the 23rd of March, 2024 at 1.00pm.



The event commenced with our honourable dignitaries Prof. Raghunath K. Shevgaonkar, Director-Rev Fr. Valerian D'souza , Assistant Director-Rev Fr Trevor Pereira, Principal Dr. Surendra Rathod, head of the departments along with students' representatives marched their way into the auditorium, followed by the lighting of the lamp - a symbol of enlightenment. Prof. Raghunath K. Shevgaonkar, IIT Bombay graced the occasion with his presence as the Chief Guest. The Chief Guest's address was insightful and one that inspired hope, optimism and pride in all students on active involvement of Indian Scientists and Engineers in International Research. More than two hundred students were awarded their Graduation Certificates by the Chief Guest, Director-Rev Fr Valerian D'souza , Assistant Director-Rev Fr Trevor Pereira, D'Souza, Rev, Principal Dr. Surendra Rathod and the Heads of the Departments.




Many parents witnessed the Degree Certificate Distribution Ceremony. Live streaming of the Degree Certificate Distribution ceremony is available on YouTube channel.
Prof. Roshni Padate and Prof. Heena Pendhari have great contribution in making the event successful. Cooperation and whole hearted support from the Principal and Management was a great motivation for organizing the event successfully.

Placements & Higher Studies Statistics

Placement and Higher Studies Statistics	
Academic Year	2023 -24
Total No. of students(Z)	141
No. of students placed(X)	66
Higher Studies(Y)	42
Placement Index(%) [(X+Y)/Z]	76.59
Highest Package Offered	INR 17.00 LPA
Company Name	Dolat Capital
Average Package	INR 6.58 LPA
Median package	INR 6.00 LPA

PLACEMENTS – 2023-24*

Universities for Higher Studies

Higher Studies

Ms. Riddhi Dinesh Oza
B.E. Computer Engineering Batch-2024
MS (DS) at Columbia University, New York City, United States

Mr. Kris Elias Corriea
B.E. Computer Engineering Batch-2024
MS (BA) at Northeastern University, Boston, Massachusetts, United States

Ms. Nisha Nitin Mascarenhas
B.E. Computer Engineering Batch-2024
MBA at Indian Institutes of Management (IIM) Calcutta, India

Mr. Aarush Makarand Verulkar
B.E. Computer Engineering Batch-2024
MS (CS-AI) University of Southern California, Los Angeles, United States

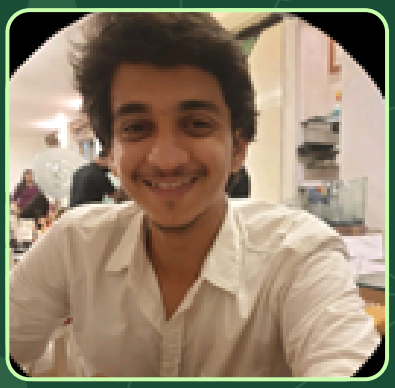
Internship Highlights 2023-24

Hitesh Sharma

(BE Computer Engineering)
Software Developer, Interactive Brokers Software Services,
Stipend Rs. 42000/-

Emmanuel Gudinho

(TE Computer Engineering)
XIRCLS
Stipend Rs. 9,000/-



Kavach Dave

(BE Computer Engineering)
(PPO) Operations Executive,
BeerBiceps Media World P. Ltd.
Stipend Rs. 20,000/-

Soham Nitin Mane

(TE Computer Engg.)
Jr Programmer, Ultimate Scaler Private Limited
Stipend Rs. 13000/-

Joshua Dmello

(SE Computer Engineering)
IT Intern, Hindustan Petroleum
Stipend Rs. 5000/-

Amey Nitin Bagwe

(BE Computer Engineering)
Software Developer Intern,
Metricoid Technology Solutions Pvt Ltd.
Stipend Rs. 5000/-

Computer Department

Thank You

for your Continuous Support and Encouragement.

The Computer Engineering Department

of

Fr. Conceicao Rodrigues College of Engineering

is Grateful for your Unwavering Dedication to Our Community.

To know more:

Visit our website

A glimpse of our Computer Dept.

Email : crce@frcrce.ac.in

Fr. Agnel Ashram, Bandstand, Bandra (W), Mumbai - 400050.