

FLASH

Electronics & Computer Science
(formerly known as Electronics and Telecommunication Engineering)
Departmental Newsletter

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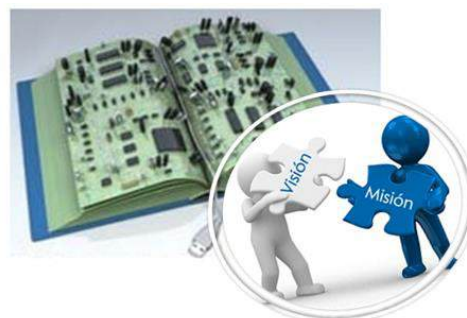
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VISION

To evolve into a Holistic Learning Hub that moulds technologically proficient engineers in the field of Electronics and Computer Science; contributing to the global industry and society with Integrity, Ethics and Professionalism as envisaged by Don Bosco



MISSION

- To impart quality education abreast with advances in technology and transform students into competent professionals.
- To promote innovation, research and entrepreneurship through collaboration and networking.
- To encourage various skill enhancing activities and extra-curricular activities to foster high levels of work ethics and responsibility for a better society.

DEPARTMENTAL DETAILS

Electronics and Computer Science is a cross-discipline integrated program that explores the exciting interface between Electronics and Computer Science (ECS). The fields to be explored are Robotics, Augmented and Virtual Reality, Internet of Things, VLSI Technology, Database Management system, Computer Vision, Cyber Security, Artificial Intelligence and Machine Learning.

The department has been organizing various programs to enhance the Industry -Institute interaction through field visit and workshops. The students are also provided an opportunity to choose specialization electives to focus on their identified areas of interest.



Department has 11 fully functional Laboratories as listed below, along with the different Software.

- Signal Processing Laboratory
- EDA tools Laboratory
- e-Yantra Robotics Lab

➤ LABORATORIES

- Basic Electronics Engineering Laboratory
- Microwave Engineering Laboratory
- Analog Electronics Laboratory
- Digital Electronics and Instrumentation Laboratory
- Communication Engineering Laboratory
- Embedded system laboratory supported by Cypress
- Project laboratory
- Control and automation Laboratory

SOFTWARES

MATLAB
Xilinx 14 Version
OSCAD
MAGIC
LabVIEW
OCTAVE
POISARPro

KITS

8051 kits
ARM kits
PIC kits
PLC kits
LAN Trainer kits
OFC Kits
PSoC ARM Cortex Kits

Tech Talks 2024: Edging towards a connected future

The Institute Industry Cell (IIC) of Don Bosco college of Engineering, Fatorda, organized Tech Talks 2024 – Edging towards a connected future, for the Electronics and Computer Science department on 26th March 2024.

Establishing an Institute Industry Cell in 2017 was a strategic move aimed at fostering a symbiotic relationship between academia and industry. The primary objectives were to facilitate ongoing interaction, bridge the gap between theoretical knowledge and practical application, and align educational curricula with industry demands. Tech talks - edging towards a connected future, was an initiative started by Don Bosco College of engineering in the year 2022, so that students are abreast with cutting edge technology thereby empowering them to stay updated and competitive in the field.



Our first speaker Mr. Mavin Kaysukar, Sr. Solutions Engineer - SUN360, gave a talk on, **“Illuminating the future using solar technology”**. Mr. Mavin Kaysukar emphasized the significance of transitioning to renewable energy sources amidst the rapid depletion of fossil fuels. He commenced by providing students with an overview of the origins of solar energy. Mr. Kaysukar walked the students through the intricacies of grid and hybrid models for solar energy installation. In addition, he discussed various emerging technologies such as Solar Edge technology, Perovskites, Tandem Solar, Flow Batteries, and Green Hydrogen. Solar Edge technology, for instance, was highlighted for its advancements in optimizing solar panel performance and improving overall system efficiency. He also discussed Flow Batteries as a promising energy storage solution, capable of storing large amounts of renewable energy for later use, contributing to grid stability and reliability.

Overall, his discussion on these emerging technologies underscored the ongoing advancements and innovation within the renewable energy sector, offering promising solutions to address the world's energy needs while mitigating environmental impact.

Our second speaker Mr. Yadnesh Sanzgiry, Head of Engineering and Project Management Office-Antares Vision India Excellence Pvt. Ltd., gave a talk on, “**Industry 4.0 and its impact on Engineering students**”. The speaker commenced by explaining the path from Digitalization to Industry 4.0. Following that, the speaker delved into the intricacies of data collection protocols, which encompassed communication protocols and platform requirements. Mr. Sanzgiry then provided a comprehensive exploration of the advantages brought forth by Industry 4.0.



He proceeded to provide the students with a briefing on the introduction to Artificial Intelligence (AI). He wrapped up the session by presenting the skill framework pertinent to Industry 4.0. Both the sessions proved highly informative, with students gaining a wealth of knowledge on the subject matter.

The Event coordinators were Prof. Flavia Leitao and Prof. Samantha Cardoso.



DBCE at Global Tech Summit 2024 by VIBRANT GOA

Vibrant Goa Foundation organized **Global Tech Summit Goa - Unleash the Future**, on 22nd and 23rd March 2024, which was a premier event that aimed at empowering businesses with the transformative power of technology, ensuring they are future ready and capable of capitalizing on new opportunities in today's rapidly evolving landscape

At the Vibrant Goa event, Don Bosco College of Engineering's (DBCE) active participation provided valuable opportunities to showcasing their achievements, fostering collaborations, and networking with industry leaders and fellow academics, leading to the exchange of ideas. DBCE displayed three products: the PLC Kit, the Arduino Kit, and the PCB engraving Machine. Among them, the PCB engraving machine, crafted by Mr. Aloysius Baptista, received much appreciation from industry experts and delegates.



The Robotics Club of DBCE **RoboCom**, led by Prof. Flavia Leitao, had an exciting time at the Global Tech Summit, while hosting their event, the **Robo Racer**, which brought together tech enthusiasts and innovators from around the globe to push the limits of robotics. From fierce competition to groundbreaking sights of the sleek machines zoom around the track with expert maneuvers, thus pushing the limits of speed and precision. Events like these not only provide a platform for showcasing talent but also foster an environment of learning, collaboration, and innovation.



National Level Project Competition –TECHNIX 2024

The Final Year Project Quality Assurance Committee, Department Of Electronics and Computer Science (formerly known as Department of Electronics & Telecommunication Engineering) in association with Don Bosco Electronics and Telecommunication Society (DBEATS) organized Technix 2024 from April 13th to May 3rd, 2024. Technix is a project competition that has been organized by the ETC Department since 2016 with the primary aim to encourage budding engineers to exhibit their novel ideas and innovative projects. Prof. Anisha Cotta and Prof. Melba D' Souza were the coordinators of the event. The Jury for Technix 2024 were Mr. Anand Lokapure, Senior Scientist at CSIR- NIO at Marine Instrumentation Department and Mr. Thejus Joseph, Interim CEO at FiiRe- Goa.

The event commenced in the month of April with the submissions of abstract proposals which went on till early May. More than 30 groups registered for the competition. The event saw entries from various colleges all over India. The project were based on latest trending domains like Augmented Reality, Robotics, Embedded Systems, Signal Processing, Machine Learning, Artificial Intelligence, Biomedical Engineering, Communication Engineering, 3D printing, Mechatronics.



The competition saw 2 phases: Phase I was the abstract shortlisting phase and Phase II was the final presentation. A total of 15 abstracts were shortlisted for the final presentation. Some of the criteria for judging included innovation, design and methodology, construction and testing and overall presentation.

The final round and valedictory function of Technix 2024 was held on May 3, 2024. The Chief Guest for the event was Mr. Anand Lokapure. The dignitaries present were Rev Fr. KinleyD'Cruz, Director of DBCE, Dr. Neena Panadikar, Principal and the Dr. D.S Vidhya HOD of the ECS Department. The valedictory function commenced with the welcome address by Dr. Neena Panadikar where she welcomed all the guests and encouraged the students to work on innovative projects. This was followed by an address by the Director Rev Fr. Kinley D'Cruz. In the address, Fr. motivated the students and appreciated the work of the coordinators and the team. Further, the Coordinator of Technix, Prof. Anisha Cotta presented the report of Technix 2024 and acknowledged the support,

motivation and guidance received to make Technix 2024 a success. The Chief Guest Mr. Anand Lokapure then addressed the gathering. In his address he shared his experience in judging the competition, suggested inputs on the projects and gave his valuable feedback.



The first place was bagged by Ayres Alroy Pereira, Aden Gomes, Adriel Ansel Rebelo Bosco John Medeira and Savio Franky Medeira from Don Bosco College of Engineering for their project titled “Indigenous Lightweight Bullet Proof Jacket”. The second place was won by Shraavan Pandurang Prabhu, Naik Prayag Pandhari, Yukta Murari Kharvi, Sawant Gadkar

Shubham Satish Goa College of Engineering, for their project titled “Design And Implementation of an Autonomous Hybrid Vehicle”. The third place was bagged by Aadarsh Chodankar, Adler Vaz, Aditya Lotlikar and Sifan Siraj Sayed from Don Bosco College of Engineering for their project titled “Design and Development of a Robotic Knee Exoskeleton for Rehabilitation and Mobility Assistance Based on Motion”.



FAREWELL 2024

The BE ETC farewell was held on 11th May 14, 2024 in the auditorium of Don Bosco College of Engineering, Fatorda. The farewell commenced at 10:30 am with the farewell march by the BE students with everyone wearing their graduation hats. The compere for the f function was Mr. Loxley Dias. The occasion was graced by the Director, Rev. Fr. Kinley D’Cruz, Principal Dr. Neena Panandikar, (HOD) Dr. D.S Vidhya.

.Director, Rev. Fr. Kinley D’Cruz, inspired the students by making them aware of what they have achieved over the last 4 years. Fr further went on to say that the elevator to success is broken down and that there is only a stairway to success. Each step to be well thought and well executed, one at a time. Principal, Dr. Neena Panandikar addressed the students on the essentials of life and motivating students to chase their dreams and achieve their goals. Head of department Dr. D.S.Vidhya in her speech fondly recalled the last four years spent with the students and encouraged them to strive harder to achieve success in all that they undertake.

The formal function was concluded by the presenting of the ‘Best outgoing students award’ to Mr. Jeremy Gilbert.

The program continued with the informal function which had performances and games organized by the junior batches. It started off with a nostalgic video depicting the memories and moments spent together over the last 4 years. Followed by a soulful song by Prof. Yeshudas Muttu. Prof. Anisha Cotta and Prof Shreyas Simu shared few memories with the class. Prof. Samantha Cardoso the class teacher of the outgoing batch also shared her experiences and fond memories of the time spent with the students. The farewell was organized by the TE-ETC students along with faculty coordinator Prof. Samantha Cardoso.



STUDENT'S CORNER

Workshops/Seminars/In-house Trainings/ Competitions

Hands-on workshop on Robo-Soccer Bot Building

The Robotics Club of Don Bosco College of Engineering, Fatorda, organized a hands-on workshop on building the Robo Soccer Bots under the mentorship of Prof. Flavia Leitao, Robotics Club Coordinator. The event, held on 20th January 2024 in the Embedded Systems Lab. The resource persons for the workshop were Mr. Maynard Rodrigues, Mr. Loxley Dias, and Mr. Royden Baretto.



The workshop began with a brief overview of the different types of bots such as the Line Follower, Robo-Racer, Robo-Sumo and Robo-Wars bot, but specifically focusing on the Robo Soccer Bot. Following the introduction, the different modules and the various components used in the Robo Soccer were discussed. Under the guidance of the experienced members of the Robotics Club, the participants assembled the soccer bot from scratch, and also got their hands on the controls.



Attended Workshop at NIT Goa: IN-SCOCOS

The memorandum of understanding (MoU) between DBCE and NIT Goa paved the way for an exciting opportunity for DBCE students to participate for the first ever Indo-Norway Workshop on "Smart Sensing, Communication, and Control Systems for Industrial Applications (IN-SCOCOS)", at NIT Goa, on 19 February 2024. A total of 30 students along with three faculty members, Prof. Flavia Leitao, Prof. Anisha Cotta and Prof. Samantha Cardoso, from the Electronics and Computer Science Department were invited to participate for the workshop.

The workshop initiated with a session on "mmWave Radar-based sensing for Industrial Applications", led by Dr. Linga Reddy from the University of Agder, Norway. Following that, was a session led by Dr. Damodar Reddy Edla from NIT Goa, delving into the topic of "Brain-Computer Interface: Present and the Future". The subsequent session highlighted "Sensors and Perception Algorithms for Industrial Applications," led by Dr. Ajit Jha from the University of Agder, Norway.



Following the lunch break, was the next session on ANN and their diverse applications, led by Dr. Ravi Prasad from NIT Goa. The next session focused on "Hardware implementation of Radar Signal processing algorithms", by Dr. Pathipati Srihari from NITK Surathkal. Following that, the subsequent topic was "Anti-Drone Systems: Sensors, Algorithms, and Challenges." The concluding session centered on "Applying Control Theory in the Development of an Automated Fog Cloud Platform for Vision-Based Mobile Robot Applications," delivered by Dr. Dinsha Vinod from the University of Agder, Norway.

Workshop on “Introduction to Arduino”

The Robotics Club of Don Bosco College of Engineering, Fatorda, organized a hands-on workshop on Introduction to Arduino under the mentorship of Prof. Flavia Leitao, Robotics Club Coordinator. The event, held on 16th March 2024 in the Embedded Systems Lab, aimed to familiarize participants with Arduino and its interfaces. Mr. Yash Kochrekar and Mr. Piyush Suthar served as the resource persons for the workshop, likely offering their expertise to guide attendees through the intricacies of Arduino programming and hardware interfacing.



. The target audience was anyone who has never used Arduino, but has knowledge of basic circuits and coding. Workshop commenced with discussion of behavior of embedded systems at very low level followed by an overview of Arduino, basic concepts such as digital and analog inputs/outputs were explained, laying a strong foundation for further learning. Participants were guided through the process of controlling an LED using a momentary button. By understanding that a button serves as a sensor, participants grasped the versatility of Arduino in interfacing with various input devices.



Overall, the workshop was a success and instilled a sense of curiosity and enthusiasm for Arduino and embedded systems in general amongst the participants.

IEEE Educational Tour to Gujarat

The IEEE Student Branch of Don Bosco of Engineering, Goa, organized its 5th Educational Tour to Ahmedabad, Gujarat, from February 14th to February 18th, 2024, under the expert guidance of IEEE Branch Counselor, Prof. Yeshudas Muttu. The tour aimed to provide IEEE student members with practical insights into various industries and academic institutions, fostering experiential learning and professional development. A total of 86 IEEE student members, accompanied by four esteemed faculty members - Prof. Yeshudas Muttu, Prof. Deron Rodrigues, Prof. Trima Fernandes, and Prof. Kimberly Morais, embarked on this enriching journey, exploring prominent establishments such as AmulFed Dairy, e-Infochips, National Forensics University, and Gujarat Council of Science City.



On February 15th, we embarked on our first industrial visit to AmulFed Dairy Company, an iconic institution renowned for its dairy products. Our tour encompassed a comprehensive exploration of the company's operations, from manufacturing units to product distribution. Continuing our journey, we visited e-Infochips, an Arrow Electronics company, on February 15th. Established over 25 years ago, e-Infochips stands as a leading provider of digital transformation and product engineering services.



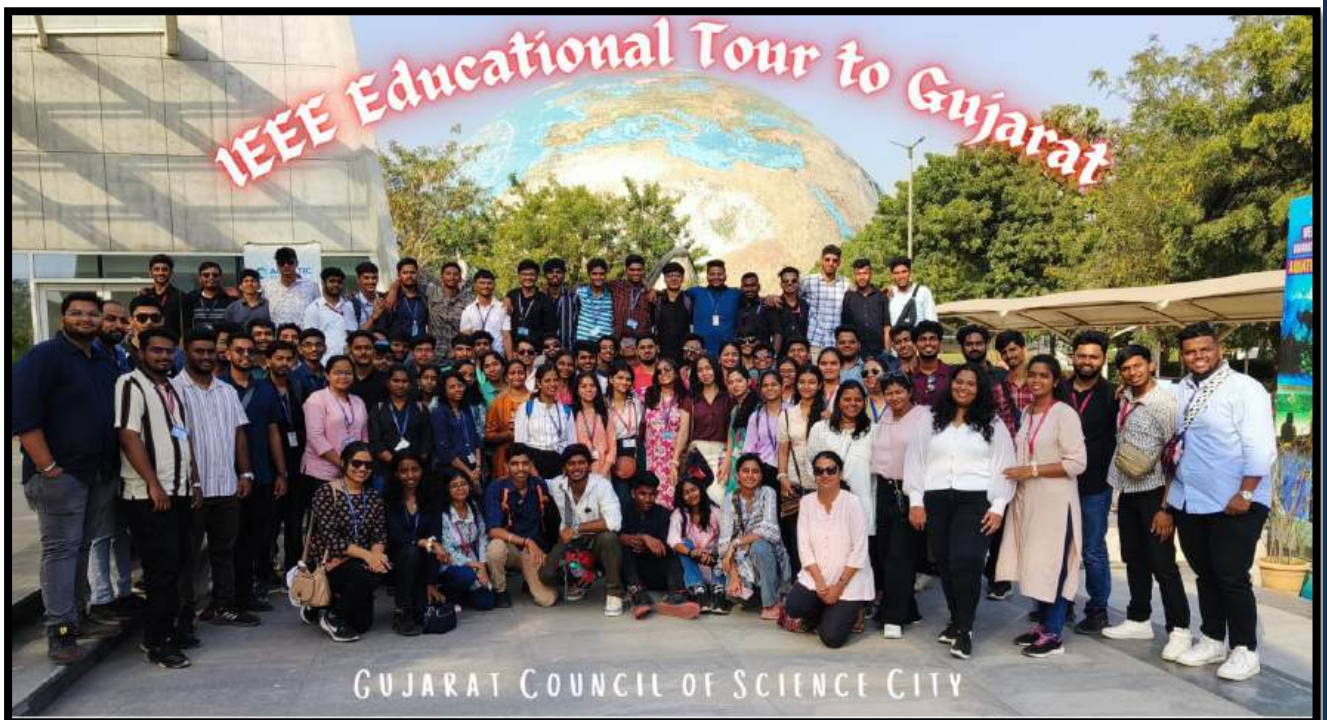
On the following day, our itinerary led us to the National Forensic University, a pioneering institution at the forefront of forensic science, law enforcement, and cybersecurity research. Through collaborative efforts, advanced research initiatives, and state-of-the-art facilities, the university continues to redefine forensic education and research in India. Departments spanning police procedures, forensic sciences, law, psychology, and cyber defense underscore the institution's multidisciplinary approach towards advancing forensic knowledge and practices.

Our tour further encompassed a visit to Science City, a hub of scientific education and entertainment. Highlights included the Aquatic Gallery, showcasing a diverse array of aquatic life, and the Robotics Gallery, demonstrating advancements in robotics technology.

Attendees were treated to captivating performances by robots, offering a first-hand glimpse into the realm of innovation and automation.



The industrial tour was a journey of discovery, learning, and enrichment. The experiences garnered during this tour will undoubtedly serve as a foundation for our academic and professional pursuits in the realm of technology and innovation.



Educational and Industrial tour for CII-IWN members

CII IWN DBCE Student's Chapter of Don Bosco College of Engineering, Fatorda organized a Educational and Industrial tour for CII IWN Student members to Pune on the 8th and 9th February 2024. On the 8th of February 2024, members of the CII-IWN Chapter DBCE engaged in a profoundly enlightening visit to the distinguished College of Engineering Pune (COEP). The visit also encompassed a captivating tour of COEP's geology museum, affording students the opportunity to witness and interact with various precious stones in their rawest forms, instilling a sense of curiosity and appreciation for the Earth's geological wonders. The afternoon unfolded with a visit to COEP's dynamic robotic club, leaving students awe-struck by the innovative projects and cutting-edge technology on display.



The second day was a visit to two prominent companies, Kirloskar Pneumatic Co. Ltd. and Kohler Power India Pvt. Ltd. The tour provided invaluable insights into the company's technological advancements and operational processes. Additionally, participants had the opportunity to witness one of the largest natural Green Walls on the premises, an accomplishment recognized in the Limca Book of Records.



FIELD VISITS

Field visit at “INDIA ENERGY WEEK 2024”

The final-year Electronics and Telecommunication students of Don Bosco College of Engineering, Fatorda, visited India Energy Week 2024 at IPSHEM-ONGC Training Institute, Betul, on February 9th, 2024. They were accompanied Prof. Trima Fernandes e Fizardo, Assistant Professor of the Electronics and Telecommunication Department.



The India Energy Week exhibition serves as an unparalleled platform for both domestic and international energy businesses to network, showcase their products and services, and explore new opportunities in the energy sector. After registration, we embarked on a tour of the exhibits

The field trip was organized by field trip Coordinator Prof. Kimberly Moraes.



EXPERT TALKS

Talk on “Philosophy of Product Design and Sustainable Innovation”

CII IWN DBCE Student’s Chapter of Don Bosco college of Engineering organized a Fireside chat with Mr. Kapil Kane on 2nd February 2024 on “Philosophy of Product Design and Sustainable Innovation”. Mr. Kapil Kane is Director of Innovation at Intel.

The fireside chat with Mr. Kane provided a rich and inspiring exploration of innovation, entrepreneurship, and the determination required to drive meaningful change.

The event was organized by the CII IWN faculty Coordinator Ms. Melba D’souza.



Talk on “NANOBOTS: THE FUTURE OF BIOMEDICAL TECHNOLOGY”

Prof. Anisha Cotta, Assistant Professor, Department of Electronics and Computer Science delivered a lecture on “Nanobots: The Future of Biomedical Technology”, as a part of NDLI on March 15th 2024. She started the session with the introduction to the basic concept of robotics and nanobots. She spoke extensively on the various applications of Nanobots in the field of medicine and stressed on its applications in cancer detection and treatment.

She also mentioned about their applications in the field of Haematology. She stressed on the advantages of Nanobots and also spoke about the difficulties faced by scientists in developing them. She further demonstrated the significance of Nanobots and its contribution to the future of Biomedical technology.

The NDLI event was organized by the NDLI faculty Coordinator Prof. Trima Fernandes e Fizarido.



STUDENT'S ACHIEVEMENTS & FELICITATION



The ETC/ECS department achieved a **Historic Victory at the Procyon 2024** by winning all three Tropies. The FE ECS class secured the First Prize, the SE ECS took the Second Prize, and the BE ETC clinched the Third Prize.

Congratulations to DBCE Robocom Team, for securing **2nd place for the LFR at QUARK 2024, BITS Pilani Goa**, on 16, 17 and 18 February 2024. The team members were Mr. Maynard Rodrigues, Mr. Alfán Vas, Ms. Danely Gomes and Mr. Mazen Leitao. Mr. Loxley Dias and Mr. Maynard Rodrigues collaborated as one team with the first Racer Bot, while Mr. Royden Barreto and Mr. Rueban Fernandes formed the other. Congratulation to Mr. Jeremy Gilbert, Mr. Piyush Suthar, and Mr. Yash Kochrekar, as well for their invaluable contributions to the design and coding of the Line Follower Bot.



Congratulations to DBCE Robocom Team, for securing the **1st place for Krack Code**” at **TECH TWISTER, RIT** on 19 and 20 February 2024.

Mr. Yash Kochrekar and Mr. Piyush Suthar participated in the "Krack Code" event.

Robocom also showcased two LFR bots, each built with precision and expertise. Jeremy Gilbert led the first bot, while Piyush Suthar, Yash Kochrekar, and Vallan Mascarenhas collaborated on the other.



Congratulations to DBCE Robocom Team, for securing the **1st place for the LFR, at IGNITRON, DBCE,** on 21 and 22 February 2024

The participants for the two LFR teams were Yash Kochrekar along with Sherwin Dias, Fay Antao and Sancha Gomes and the other team by Jeremy Gilbert along with Piyush Suthar, Allanry and Diya Shanbhag.

The first Robo Racer team was led by Royden Barretto, and the second by Mazen Leitao along with Preston Dsilva, Merrill Dias and Bibisifhat.



Congratulations to DBCE Robocom Team, for securing the **2nd place for Line follower robot competition, at TECHURJA, AITD** on 1 and 2 March 2024.

The participants were Preston Dsilva, Mazen Leitao, Sandeep Sawant, Kingel Fernandes, Danely Gomes, Manisha Singh, Manasavi Borkar, Merrill Dias, Royden Barreto, Bibisifhat, Vallan Mascarenhas, Reuben Fernandes, Yash Kochrekar.



Congratulations to DBCE Robocom Team, for securing the **2nd place for Line follower robot competition**, at SPECTRUM - GEC, Goa, on 3 and 4 March 2024.

The team members were Rucha Sawant and Ridhima Vernekar for LFR.

In the Robo Soccer, Preston Dsilva displayed tactical maneuvers and teamwork, pushing the boundaries of robotic control systems.

The Robo Racer event, Bibisifhat performed admirably, navigating the course with finesse.



Congratulations to DBCE Robocom Team, for securing the **1st place**, for the **Prompt-A-Thon event**, at SAAVYAS, NIT, Goa, on 12, 13 and 14 April 2024

Yash Kochrekar and Vivek Bobade exhibited sheer wizardry in **Prompt-A-Thon**, showcasing their mastery over AI technology. Preston Dsilva and his team proved their mettle on the soccer field during the intense Robo Rumbling competition, securing **4th place**. Yash Kochrekar and Piyush Suthar, leading the Coding Gang, unleashed their coding prowess at the **Bit Bash** event, breezing through intricate puzzles with lightning speed.



- A number of NPTEL courses are done by students as part of their curriculum, earning recognition for their accomplishments.

TRAINING AND PLACEMENTS

Placements

- Ms. Simmi Mhapsekar has been placed in Creative Capsule
- Ms. Karen Mendes has been placed in IFB as Graduate Engineer Trainee (GET)

FACULTY INITIATIVES

CERTIFICATIONS/ AWARDS/ ACHIEVEMENTS

- Robotics Group RoboCom led by Prof. Flavia Leitao won at the following events:
 - ✓ 2nd place for Line Follower at QUARK-BITS PILANI
 - ✓ 1st place for KRACK CODE at Tech Twister -RIT
 - ✓ 1st place for Line Follower at Ignitron - DBCE
 - ✓ Hosted Robo-Racer at Global Tech Summit, Vibrant Goa.
 - ✓ 2nd place for Line Follower at TECHURJA - AITD
 - ✓ 2nd Place for Line Follower at Spectrum - GEC.
 - ✓ 1st Place for Prompt-A-Thon and 4th Place for Robo Soccer and Bit Bash at SAAVYAS- NIT Goa
- Dr. Shreyas Simu gave a Session on “Introduction to AI- Artificial Intelligence & Machine Learning and its dark side”, at Airway Public School, Vidyanagar, Vasco on 17th February 2024, Shri Damodar Vidalaya Eng.H.Sc, Comba, Margao on 21st February 2024, Our Lady Of Rosary High School, Fatorda on 23rd February 2024 and Ravindra Kelekar Dnyanmandir, Margao on 27th February 2024, under VIDNYAN DHARA
- Prof. Anisha Cotta conducted a session on “Nanobots: The Future Of Biomedical Technology”, on March 15th 2024, under NDLI Club-DBCE.
- Prof. Anisha Cotta conducted a session on “Nanobots: The Future Of Biomedical Technology”, at Swastik Vidyalay, Ponda and at Our Lady of Mercedes High School, Mercedes, under VIDNYAN DHARA
- Successfully completed 8 weeks NPTEL course on “Data Base Management System”, from July- Sept. 2023, organized by IIT, Karagpur.
- Successfully completed 8 weeks NPTEL course on ““Operating System Fundamentals”, from July- Oct. 2023, organized by IIT, Karagpur.



- Prof. Deron Rodrigues successfully completed 8 weeks NITTT course in “Professional Ethics and Sustainability” (Module 2), from 1st Oct. 2023 to 30th Nov. 2023
- Prof. Deron Rodrigues successfully completed 8 weeks NITTT course in “Instructional Planning and Delivery” (Module 4), from 1st Oct. 2023 to 30th Nov. 2023



- Prof. Yeshudas Muttu Conducted the IEEE STEM Program: Repairing and Working of LED Bulbs, for the Government High School students, Kudchire



WORKSHOPS/SEMINARS/EXPERT TALKS ATTENDED

- Prof. Selvyn Fernandes attended a 1 week ISTE approved FDP on “Six Sigma for Improved Quality management”, organized by the Mechanical Department of DBCE, from 13th May to 17th May 2024.
- Prof. Flavia Leitao, Prof. Anisha Cotta and Prof. Samantha attended the first ever Indo-Norway Workshop on “Smart Sensing, Communication, and Control Systems for Industrial Applications (IN-SCOCOS)”, at NIT Goa, on 19 February 2024

CONFERENCE PAPER/ JOURNAL PUBLICATIONS

- Research paper entitled “ Direction of Arrival (DOA) Estimation using Switched Beam Antenna with Butler Matrix at mm-Wave Frequency” has been published in Nano communication network journal published by Elsevier JUNE 2024

UPCOMING EVENTS

- IEEE Workshop on "AI models for beginners", in July 2024
- Fieldtrip for SE,TE ECS, in August 2024
- e-Yantra workshop, in August 2024
- DBEATS Installation, in August 2024
- The IEEE GRSS Techquiz in August 2024
- DBEATS Workshop on “AI/ML”, in August 2024
- Fieldtrip for BE ETC, in September 2024

COMMUNITY OUTREACH

VIDNYAN DHARA 2024 - By Prof. Anisha Cotta

Prof. Anisha Cotta, Assistant Professor, Department of Electronics and Computer Science delivered a lecture on “Nanobots: The Future of Biomedical Technology”, as a part of ‘Vidnyan Dhara’ – a mega science series programme by Directorate of Higher Education (DHE) and Goa State Higher Education Council (GSHEC). The uniqueness of this event is to motivate a multidisciplinary education approach amongst the faculties and students in Goa.



The sessions were conducted at Swastik Vidyalay, Ponda and at Our Lady of Mercy High School, Mercers. Prof. Anisha started the session with the introduction to the basic concept of robotics and nanobots. She spoke extensively on the various applications of Nanobots in the field of medicine and stressed on its applications in cancer detection and treatment. She further demonstrated the significance of Nanobots and its contribution to the future of Biomedical technology.

The talk received a wonderful feedback from the students and they were enthusiastic to learn new concepts and upcoming technologies. It captivated the attention of students and ignited a spark of curiosity and innovation amongst the students.



VIDNYAN DHARA 2024 - By Dr. Shreyas Simu

As a part of the National Science Day celebration, Goa State Higher Education Council and the Directorate of Higher Education organised a “Vidnyan Dhara 2024” - a mega science series to celebrate National Science Day 2024. In view of the same, a talk was delivered by Dr. Shreyas Simu, Assistant Professor, ECS Department, Don Bosco College of Engineering, Fatorda at Airway Public School, Vidyanagar, Vasco on 17th February 2024. Also at 3 other places the same session was delivered namely Shri Damodar Vidalaya Eng.H.Sc, Comba, Margao on 21st February 2024, Our Lady Of Rosary High School, Fatorda on 23rd February 2024 and Ravindra Kelekar Dnyanmandir, Margao on 27th February 2024. He educated the students on the topic- “Introduction to AI- Artificial Intelligence & Machine Learning and its dark side”.



The highlights of the talk included: What is AI/ML?, Approaches to AI, Turing test, Strong and weak AI, Signal and Image processing Applications, Robotics and Computer Vision applications, Dark Side of AI. The speaker emphasized on the role of machine learning to solve complex problems. He mentioned “Basic mathematics is very important in the field of AI and ML”.



Seminar on BLDC Motors and Coolers for School Students under NSQF

The IEEE Student Branch of Don Bosco College of Engineering, Goa delivered a seminar on "BLDC Motors and Coolers" for the students of Pope John XXIII High School, Quepem on 11 March 2024. The event aimed to introduce the students to the principles and applications of BLDC motors and coolers. The resource persons for the seminar were IEEE Student members, Mr. Clarence Dias and Mr. Soham Tulaskar. Mr. Clarence Dias delivered an engaging session on BLDC motors, where the working principle and applications of the BLDC motors was covered while Mr. Soham Tulaskar explained on how the coolers work. The event was coordinated by Prof. Yeshudas Muttu, Branch Councillor IEEE SB of DBCE Goa.



IEEE STEM: Repairing and Working of LED Bulbs

On March 23, 2024, a visit was conducted to Government High School, Kudchire, by Soham Tulaskar and Sir Yeshudas Muttu, representing DBCE IEEE Student Branch. The purpose of the visit was to deliver a talk on the repairing and working of LED bulbs to the students. The main objective of the visit was to educate and inspire the students about the functioning and repair of LED bulbs, fostering their interest in technology and engineering. Soham Tulaskar, accompanied by Prof. Yeshudas Muttu, delivered an engaging talk to 18 students at Government High School, Kudchire.

