



Ameca Robot shows off new level of human-like facial expression

Engineered Arts, a robot maker based in the U.K., is showing off its latest creation at this year's CES 2022. Called Ameca, the robot is able to display what appears to be the most human-like facial expressions by a robot to date. On its webpage, the company calls Ameca "The Future Face of Robotics." The software it comes with is geared toward creating life-like expressions. It can smile, frown, wink and open and close its mouth. It can also show surprise or frustration or amusement. Ameca is currently available for sale through the Engineered Arts website certain models are also available for renting for events.

By Ms. Chidrawar S. B.

UPCOMING EVENTS

In this semester we are planning for our annual student event TALENT HUNT 2K22

In TALENT HUNT students are going to organize various events like Robo-racing, Paper presentation, Quiz contest and Circuit Sudoku. Winner will awarded with trophies and certificates. Last year 200 students were participated in this events. Through this we got success in front of motivating our student to participated in competitive events, not only for our institute but also national as well as international competitions.

Industrial visit for 2nd and 3rd year students

We are planning industrial visits for our students to Akashwani Satara and ApTron Tech Satara, SM technologies Pune and BSNL Pune.

Expert Lecture

We plan expert lecture over the syllabus which conducted by industry experts for students.

Student Development

Department conducted short term professional courses in that we take 10 to 15 days workshop for student. Last vacation we conducted workshop for Robotic and Arduino programming . Upcoming vacation we plan for Arduino and Raspberry Pi project development and PCB Design. Also planning for implant training for students.

"Electronic communication is an instantaneous and illusory contact that creates a sense of intimacy without the emotional investment that leads to close friendships."

EDITORIAL

It gives us great pleasure to present the 9 volume and second issue of our departmental newsletter "ELECTRA", which gives us the opportunity to focus the achievements in our department and new trends in Electronics and Telecommunication field.

I am thankful to all the students and faculties who have contributed during the preparation of this newsletter. We have tried our best and given positive efforts, expecting creative responses from everyone to continue the flow of knowledge.

Student Coordinator
Ms. Vaishnavi Tonage

(TYEJ)



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VISION

To be recognized as one amongst the best Electronics & Telecommunication Engineering Department in Maharashtra to fulfill the changing needs of the industry along with environmental and social aspects.

MISSION

1. To impart value based technical education in electronics and telecommunication engineering.
2. To develop technical knowledge of students.
3. To inculcate various skill sets of electronics and telecommunication among the students.
4. To make students ready for lifelong learning.

ABOUT DEPARTMENT

Electronics And Telecommunication Engineering Departments had been start in 2008, with intake of 60 . Our departments have 6 well-equipped laboratories and 12 well qualified teaching staff. We have established the association " Talent hunt " in which we conduct various activities like Quiz competition, Power point presentation, Robotics, Poster presentation, LAN gaming etc. This departments have organized various expert lectures and workshops like Embedded System, Arduino, Robotics, PLC and PCB Designing for the overall development of students. This type of activities are used to get better result in academic and overall development of students.

FLEXOUND PULSE



Figure: Flexound Pulse

Flexound Augmented Audio has launched the Flexound Pulse, a cinema seating solution that creates a personal sound bubble around movie watchers for the promise of a full-range quality audio experience without the use of external loudspeakers .The Flexound Augmented Audio vibro -acoustic experience makes use of physical soundwave vibration to generate multisensory audio, and was originally developed to help autistic children. Among the first commercial outings were in movie theater seating, with a cinema in Finland kicking things off in February 2019, followed by the UK's Ferco Seating gaining official certification for two boosted models in June, and TGV Cinemas installing 140 of Ferco's Milano seats in a theater in Malaysia.

Unlike loudspeakers that vibrate sound into the air, this radiates the vibration through foam, providing a soft, near-field listening experience. Originally designed and engineered in Finland to help autistic children, the patented technology can be embedded into seats, cushions, or anything that is soft and in contact with the body

The technology could also enable auto makers to install personalized sound zones in cars, provide driver-only physical feedback, or offer sound massages to vehicle occupants. Use cases for automotive applications were demonstrated at a Hyundai event in December of last year.

By Mr. Valte. P. S.



What will be the scope of ECE after 2022 in India?

Ever since the evolution of technology, Electronics and Communication have come to be a crucial area that's required by all of the industries. Hence, Electronics and Communication Engineering are some of the most well-known branches by college students. So college students pursuing electronics and communication engineering have plenty of scope in numerous industries

Year 2022

Our needs and demands will increase. Earlier we were happy with data rates of 10 Gbps, but now we will need be needing more. 6G will arrive in the market. Requirement of faster processing will lead to evolution of 16-32 core processors. Artificial intelligence virtual reality will reach to new heights. Robotics will give us Butler bots, new companions to help us in daily work. There is no end to technology. It will keep on flourishing. There will always be a great score in this field.

By Ms. Jagtap S. B.



JOB OPPORTUNITIES FOR ELECTRONICS ENGINEER

Private Sectors: Tata tele services, Vodafone, Samsung, Intel, LG Electronics, Wipro, Cisco, Dell India, Reliance Infotech, Red pine, General Electric, Texas Instruments.

Public Sectors: Bharat Electronics Ltd. (BEL), Bharat Heavy Electricals Ltd. (BHEL), National Aluminum Company Ltd. (NALCO), National Thermal Power Corporation (NTPC), POWERGRID, HPCL, BSNL.

Latest ECE Technologies to learn are : Robotics, Internet of Things (IOT), Artificial Intelligence/ Machine, Learning, Drone Development, Mechatronics Smart Energy Systems,, Automation Technologies.

By Ms. Hakim A. A.

What makes a good electronics and communications engineer?

- First, you should understand what is Electronics. This may sound silly. But try to explain to someone who does not know anything about electronics, without using the terms "Diode", "Transistor", "Circuit", "IC", "Microprocessor". etc.
- Second, Electronics is a branch of Electrical. So try to be strong in Electrical Fundamentals
- Third, Understand the Basic Transistor Circuit.
- Fourth, understand the Digital Circuit thoroughly from AND, OR, NOT gates to Microprocessors.
- Fifth, Understand C language thoroughly. It is a simple set of rules defined by Dennis Richie. You can master C language with in a shortest time.
- Sixth, Master C programming skill. This is the most essential skill for the ECE students today. Without this skill you will find it difficult to enter into electronics core companies.
- Seventh, Buy a Microcontroller kit and apply the C programming skill to do good electronic projects by yourself without copying a single line of code from net/book/ friends.
- These 7 steps will make you to eligible get a job in Electronics industry. Try to understand that in Core Industries Basics is the KING. So always master the Basics.

By Ms. Dongare M. A.



Departmental Achievements in academic Year 2020-21

STUDENTS

- Our student Jadhav Onkar Bharat from TY Class has done 62 electronics projects successfully.
- Three students of our department from SY and TY class has participated in "Regional Level Project Competition" organized by Government Polytechnic, Karad.

FACULTY

- Our staffs had gone through the various trainings like short term training programs, Faculty Development Program online due to pandemic situation.
- Four staff of our department are pursuing ME & One staff have completed ME in various field.
- All staff are involved in R & D activities and in the verge of completion of several projects sponsored by agencies like IEI Kolkata.

DEPARTMENTAL RESULT FOR A.Y. 2020-21			
SR. NO.	NAME OF STUDENT	% MARKS	CLASS
1	MS. KULKARNI SHRADHA RAMKRUSHNAHARI	94.63	1 ST YEAR
2	MS. TAMBOLI ASHIYA AYUB	89.13	1 ST YEAR
3	MR. CHAVAN YASHWANT TUKARAM	87.63	1 ST YEAR
1	MS. SURAYYA MAKBUL PATHAN	91.33	2 ND YEAR
2	MS. TONAGE VAISHNAVI ARVINDKUMAR	90.00	2 ND YEAR
3	MS. GORE GAYATRI RAMCHANDRA	87.78	2 ND YEAR
1	MS. RANDIVE AMRUTA BRAMHADEO	96.12	3 RD YEAR
2	MS. WAGAJ SHRUTI SHRIKANT	95.35	3 RD YEAR
3	MR. MANE ASHITOSH DARLING	93.41	3 RD YEAR
3	MR. PARCHANDE SAURABH SUDHIR	93.41	3 RD YEAR

EYE ON IT

TECHNOLOGIES DEVELOPED BY DRDO ELECTRONICS DEPT. GOVT. OF INDIA.

- Battlefield Surveillance Radar
- EOCCM-Class Laser System
- 3D-CAR
- Revathi
- Weapon Locating Radar
- Sangraha
- Samyukta
- Antenna Systems
- Communication Systems
- Briefcase SATCOM Terminal
- Sectel
- Sujav
- Integrated Weapon System Simulation
- Multi-Detector Tomography System
- Laser Designator PRF Code Recognition Device
- Palmtop Green Microchip Laser Module
- Passive Q-Switching
- Threshold Detector

SOFTWARE USED FOR ELECTRONICS.

- MATLAB
- Xilinx ISE
- Altera Quartus
- Code Composer Studio
- HFSS
- OptSim
- Commsim
- µVision IDE
- Emu8086
- Proteus Design Suite
- PSpice
- Agilent Advanced Design System