

ABES INSTITUTE OF TECHNOLOGY



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

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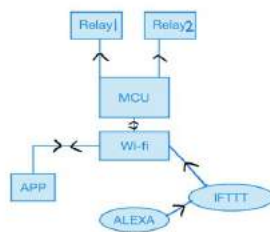
Editorial Board

- Ms. Sugandh Gupta
Assistant professor
ECE

Wouldn't it be cool to be able to control your Lights, TV or any other appliance using your mobile without having to walk to the switches? Taking it to the next level, wouldn't it be awesome we could also voice control these tasks? Furthermore, it would even be cooler if we could also check the status of our House Lights while being at work and even remotely control them from anywhere.

Such IoT based applications are easily possible by using minimal and basic components. All you need to have is some basic knowledge about electrical circuits, relay operation and its control using microcontroller, basic programming knowledge for coding and improving the functionality of your application and Internet connection if remote access is required.

Given below is the description of such an example prototype. This prototype is basically a **Smart Power Strip** that features 2 sockets that can be independently controlled by an app as well as can be voice controlled using Alexa (Amazon's Voice Assistant). This example also features a multi-coloured mini lamp that can be controlled by app too and also features voice control via Alexa. The module also has 2 master switches that can be used for completely switching off the sockets so if someone wants to use the power strip in a conventional manner without using the "smarter" ways, that option is also present. A basic block diagram showing the components and flow of the process is given below. Also, a picture for the prototype is given.



Aviral Malay (Assistant Professor, ECE) ABESIT

Vision

To impart in depth knowledge to the students of Electronics & Communication Engineering for achieving academic excellence, professional attitude and ethical values, inculcating research culture to meet the challenges of global industrial demands.

Mission

- M1** Impart quality and value based education, with practical orientation to transform students into the skilled, trained and competent individuals.
- M2** Infusing research culture among students and faculty so that the Department be recognized as Center of Excellence in various domains.
- M3** Inculcating team work, leadership qualities, professional ethics and social responsibilities.
- M4** Prepare graduates for working in multicultural and multidisciplinary environment.

Program Educational Objectives (PEOs)

- PEO1:** Graduates of the program will be able to identify and apply domain specific knowledge to have a successful career in real world applications by keeping abreast of the technological changes.
- PEO2:** Graduates of the program will continue to learn and adapt in a world of constantly evolving technology through advanced degrees, professional courses and/or research.
- PEO3:** Graduates of the program will be committed to acquire professional ethics, moral values and devotion to duty so that they prove to be worthy citizen of India with International outlook.

Program Specific Outcomes (PSOs)

- PSO1:** Analyze and apply the acquired knowledge in designing application in the field of VLSI and Embedded System.
- PSO2:** Should possess the skills to develop, analyze and synthesize various functional elements of communication system and signal processing.
- PSO3:** Proficiency in specialized cutting-edge software packages and computer programming useful for the analysis/design of electronic engineering systems.

Moments of Pride.....

6th Rank in Swachh Campus Ranking by MHRD.

- **Dr. Sapna Katiyar, HOD, ECE, Aman Raj, Pallavi Goswami and Prachi Bharadwaj, Students of Final Year ECE**, along with Prof. (Dr.) Vipin Garg, Advisor of the Institute, Mr. Ashu Goel, Chairman of the Institute and **Dr. M.K Jha, Director of the Institute** got an opportunity to witness the moment when the Institute was recognized as one of the cleanest and most hygienic campuses PAN India for “Swachh Campus Ranking -2018” and the award was presented on 1st October, 2018 in the presence of Shri Prakash Javedkar-Union Minister for Human Resource and Development, Dr. Satya Pal Singh-Union Minister of State for HRD, Shri R. Subrahmanyam-Secretary, Higher Education, Shri D.P.Singh-Chairman UGC and Shri Anil Sahasrabudhe-Chairman AICTE.



First Rank in Dr. Kalam Entrepreneurship League.....

- **Prof. S.B Bajpayee, ECE** received the award on behalf of ABESIT for securing First rank in Dr. Kalam Entrepreneurship League on **15th October 2018** from Hon'ble Vice Chancellor at AKTU Lucknow.



Events Corner

iB Hubs conducted “World Class IoT Bootcamp-2018” at ABESIT, Ghaziabad from 16th July -20th July, 2018:

The Bootcamp was attended by 44 participants (Students, Faculty Members & Entrepreneurs) from various organizations . The Resource persons were:

- Ms. Kavya (Director, iBuild Innovations India Ltd.),
- Mr. Manikanta (Project Manager, IoT at iB Hubs),
- Mr. Abhinav (Security Engineer, Cyber Eye-Cyber Security Division, iB Hubs)
- Mr. Atul Dubey (IoT Team, iB Hubs)



Inauguration of Center of Excellence for IoT on 11th August, 2018:

Industry Experts who were present during the inauguration for interaction with the students regarding the scope of IoT and its challenges in coming future were as follows:

- Mr. Prashant Kumar Sahoo, Co-Founder, eXabit Systems Pvt. Ltd., Bangalore
- Mr. Vinay Chaddha, Co-Founder, GVC Systems Pvt. Ltd., Noida
- Mr. S.D. Mehta, Director, Entuple Technologies Pvt. Ltd., Bangalore
- Mr. Avik Dutta, Country Representative-India-DigitalEd & Maplesoft



The Department Advisory Committee meeting of Department of Electronics and Communication Engineering was held on 22nd September, 2018:

The DAC committee is comprised of Academicians, Industry experts, Alumni. The meeting was held to discuss the steps to be taken to achieve the vision and mission of the department.



E- Yantra Robotics Competition under the guidance of IIT Bombay was conducted on 25th September, 2018:

The Department faculties conducted a test of e-Yantra Robotics Competition under the guidance of IIT Bombay where students of various branches got themselves registered. 36 students of 2nd and 3rd Year ECE registered for the test.

In further rounds of the competition, students will learn the concepts of solving the real life problems using robotics.



Expert Talks

- An Expert Talk on “**Optical fiber Networks**” by **Air Commodore V.K Sharma, Head of MP Birla Telecom Academy**, a Training Center in the field of optical fiber networks was organized for the students of the department on **12th September, 2018**. Mr. Sharma briefed the students about the Concepts related to laying the Optical networks, their problems, solutions and precautions.



- An Expert Talk on **Embedded Products** under the title “**From Ideas to products**” by **Mr. Vinay Chaddha, Co-founder, GVC Technologies, Noida** was organized on **10th October, 2018**, where he motivated the students to come out with new ideas that can be converted into saleable products.



Industrial Visits

- A visit to **Automation Engineers A.B. (P) Ltd., Noida, Phase-2** for the students of 2nd Year ECE was organized on **24th August, 2018** where the students interacted with Automation Experts and discussed about the new era of the technologies in the field of automation. They also got the opportunity to understand the concept of MCB, MCCB, ACB, PLC, SCADA and DRIVES.



- A visit to **MP Birla Telecom Academy, Gurugram- (Haryana)** for the students of 2nd Year ECE was organized on **14th November 2018**. MP Birla Telecom Academy is the leading training academy in optical fiber communication technology. Students here, interacted with Mr. Aakash Srivastava, Fiber Expert and discussed about the new era of the technologies in the field of Optical Fiber Communication. They also got the opportunity to understand the concept of Trenching, Splicing, Ducting, Patch Code, Pigtail, GPON and Various Optical Fibers.



Student's Achievements

“Role of Technology in Innovation” and Startup Pitch Competition as a part of ‘Dr. KALAM STARTUP PARIKRAMA’, an AKTU Sponsored Workshop held on 3rd July, 2018 at ABESIT, Ghaziabad

- **Shivam Soubhari and Piyush Kumar**, Final Year students of the Department won cash prize of Rs. 3000 for their idea, **“Smart Shop System”**.



Kalam Start-up Parikrama Edition 16 on 27th August 2018 at KIET, Ghaziabad

- **Aman Raj , Aditya Kumar Singh , Abhishek Shukla , S V Venugopala**, 4th Year ECE were shortlisted to present their idea on **“Smart Air Monitoring System”**.



“AICTE-ECI—ISTE Chhatra Vishwakarma Awards-2” - A Competition jointly held by All India Council for Technical Education (AICTE), Ministry of Human Resource Development, Govt. of India, Engineering Council of India(ECI), and the Indian Society for Technical Education (ISTE)

Following Projects of 4th Year, ECE were shortlisted :

- **Aman Raj** and team with their project on **“Air Quality Control”**.
- **Harsh Malik** and team with their project on **“Smart Garbage Bin”**.
- **Aagman Jaiswal** and team with their project on **“Water Quality Monitoring through IoT”**.
- **Manu Yadav** and team with their project on **“ Efficient Lighting Solution”**.



Student's Achievements

Student Engineering Model Competition in Indian International Science Festival (IISF), 2018.

- **Neeraj singh**, 4th Year ECE was invited to the Conference on 7th October 2018 on “**Development and Promotion of Art and Crafts**” at Indira Gandhi Prathisthan, Lucknow to present his sketches.



DST India Innovation Challenge Design Contest(IICDC) 2018

- **Aman Raj , Aditya Kumar Singh , Abhishek Shukla , S V Venugopala**, 4th Year ECE were shortlisted to present their idea on “**Air Quality Control**”.



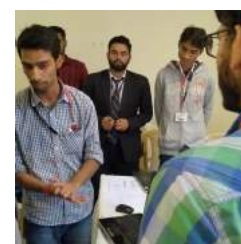
GAMBADE Event held at Hi-Tech Institute of Engineering and Technology, Ghaziabad on 27th October, 2018

- **Anshuman, Akash Tevatia, Aditya Kumar pandey and Jyoti Gupta** of 3rd Year ECE secured 3rd position in the event **GAMBADE** held at Hi Tech College on 27th October, 2018.



Innovation Gallery - Water Challenge 2018 organized by AKTU, Lucknow

- **Piyush Kumar**, Final Year Student qualified in the first round for prototyping grant by AKTU, Lucknow in the “**Innovation gallery- Water Challenge 2018**” organized by the University with his idea on **Waste Water Purification by Electrolysis Process**. The next presentation will be held on 15th January 2019.



Faculty's Corner

Faculty Development Programs

- The Department organized a 3-days workshop on “**Analog Applications**” sponsored and supported by AKTU from **18th to 20th August, 2018**. A total of 44 Faculty Members from about 18 different institutes attended this workshop. **Ms. Manjit Saini, trainer from Sapience Consulting**, focused on imparting hands on experience to the participants, developing prototypes and projects using analog components and circuits.



- 12 Faculty members of the Department attended a 5-days ICT Mode short term training program on “**Outcome Based Education and Accreditation (ICT-04)**” scheduled from **24th September, 2018 to 28th September, 2018**. This short term program was conducted by National Institute of Technical Teachers’ Training and Research, Kolkata, (An Autonomous Institute under MHRD, Govt. of India).



The training program focussed on illustrating steps for developing Outcome Based Curriculum(OBC) and identifying outcome based learning-teaching and assessment processes.

Congratulations !!

- Mr. Aviral Malay (Assistant Professor, ECE)** qualified to participate in the Young Scientist Conference as an event of **International Science Festival** which was **inaugurated by Honorable President of India, Ram Nath Kovind** and was organised in Lucknow at Indira Gandhi Pratisthan from **5th-6th October, 2018**.



Aviral Malay



Aakansha Garg



Aanchal tyagi



Preeti Sharma

- Ms. Aakansha Garg** (Assistant Professor, ECE) qualified UGC NET Exam July, 2018.
- Ms. Aanchal Tyagi** (Assistant Professor, ECE) got enrolled in **Ph.D** in the field of **Signal Processing** from **Jaypee University, Noida**.
- Ms. Preeti Sharma** (Assistant Professor, ECE) got enrolled in **Ph.D** in the field of **Artificial Intelligence** from **Indraprastha University, Delhi**.

ABESIT Annual Fest 2018 (Festin-O-Beats 10.0)

The Annual Fest of ABESIT, Ghaziabad, “Festin-O-Beats 10.0” was organized from 4th to 6th October 2018. The Fest included the events like cultural, literary, technical, fine arts, photography etc. Students from different institutes participated in these events. Following is the list of students of the department who secured various positions in their respective events:

S.No.	Event	Student's Name	Year	Position
1.	National Youth Parliament Session	Avni Sharma	1 st	1 st
2.	Duet Singing	Siddharth Pandey	2 nd	1 st
3.	Group Singing	Siddharth Pandey	2 nd	1 st
4.	Spell Bee	Ravaishmi	2 nd	2 nd
5.	Caricature	Pratyush Priyansh	2 nd	2 nd
6.	Best Shot	Aditya Singh	4 th	2 nd
7.	Hobby Collection	Neeraj Singh	3 rd	1 st
8.	Collage Making	Harsh Rawat	1 st	1 st
9.	Salad Carving	Piyush Kumar	4 th	2 nd
		Nirbhay Patel	4 th	2 nd
10.	Technical Quiz	Prachi Bharadwaj	4 th	1 st
11.	Treasure Hunt	Utkarsh Shivam	2 nd	2 nd
		Utkarsh Arora	2 nd	2 nd
12.	Gliders	Srinivas	4 th	1 st
		Aman Raj	4 th	1 st
		Piyush Kumar	4 th	1 st
13.	Frugal Engineering	Piyush Kumar	4 th	1 st
		Nirbhay patel	4 th	1 st
		Pradyuman Awasthi	4 th	1 st



ABESIT Annual Fest 2018 (Festin-O-Beats 10.O) (Contd...)

S.No.	Event	Student's Name	Year	Position
14.	Technical Poster	Pallavi Goswami	4 th	2 nd
15.	Circuit Debugging	Piyush Kumar	4 th	1 st
		Aman Raj	4 th	2 nd
16.	Chess (Boys)	Utkarsh Arora	2 nd	1 st
17.	Chess (Girls)	Ritu	4 th	2 nd
18.	Volleyball (Boys)	ECE Team	1 st , 2 nd , 3 rd , 4 th	2 nd
19.	Long Junp (Girls)	Jyoti Chaudhary	2 nd	1 st



Upcoming Events
Come and Join us!!
in

Unnat Bharat Abhiyan

a Flagship Program of Ministry of Human Resource Development (MHRD), Govt. of India, where some of the students and Faculties of ECE are shortlisted to work for people of rural India, identify their problems and challenges and thus provide the optimal solutions for sustainable growth of the villages.

Reminiscence 2019 (Alumni Meet) on 19th January, 2019

***FDP on Remote Sensing & Image Processing Applications in Rural/
Urban Development/ Planning in
June, 2019 supported by TEQIP III, AKTU, Lucknow***