Engineering at its best...!

Sanchar

GEC WORK IS WORSHIP

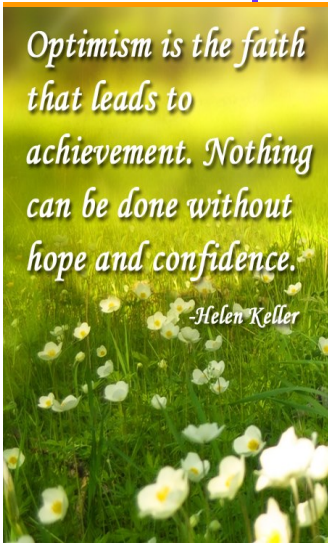## THE ELECTRONICS & TELECOMMUNICATION DEPARTMENT NEWSLETTER

turn **inside**

Optimism is the faith that leads to achievement. Nothing can be done without hope and confidence.

-Helen Keller

E-yantra Lab Inauguration

News & Views

E-yantra Lab inauguration through online mode was held on 02-08-2017. E-yantra Lab is an initiative from CSE department of IIT Bombay with the intention of promoting hands on learning of embedded systems and robotics concepts. Our college joined hundred other colleges in India as part of E-yantra network. The event started with welcome by the E-yantra team from IIT Bombay over video conference followed by display of video of challenge competition. The valedictory function of Task Based Training (TBT-2017) for the faculty was held at the same time.

Certificates for the faculty from our college were distributed by our principal, Dr. R. B. Lohani. Prof. Sangeeta Mahadalkar, Prof. Mahesh Caisucar, Prof. Gajanan Gawade and Prof. Milind Fernandes formed the team which represented Goa College of Engineering and were among the top 10 teams all over India in TBT 2017. The lab inauguration was done by first lighting of the lamps, followed by ribbon cutting and E-yantra signage opening ceremony. We had the good fortune of having Lt Gen Subrata Saha of the Indian Army to address all who were gathered on the occasion. Dr. R. B. Lohani then addressed the gathering followed by a vote of thanks by Prof. Milind Fernandes.

Students Project Presentation

Amazon Alexa and Echo

3

Amazon Alexa is a virtual assistant developed by Amazon. It is capable of voice interaction, music playback, making to-do lists, setting alarms, streaming podcasts, playing audiobooks, and providing weather, traffic, sports, and other real-time information, such as news. It can also control several smart devices using itself as a home automation system. Users can extend the Alexa capabilities by installing "skills".

Most devices with Alexa allow users to activate the device using a wake-word, in this case "Alexa". The name Alexa was chosen due to the fact that it has a hard consonant with the X and therefore could be recognized with higher precision. The name is also claimed to be reminiscent of the Library of Alexandria.

Amazon Echo is a brand of smart speakers developed by Amazon.com.The devices connect to the voice-controlled intelligent personal assistant service Alexa. In the default mode, the device continuously listens to all speech, monitoring for the wake word to be spoken. Echo devices require a wireless Internet connection in order to work. Echo's voice recognition capability is based on Amazon Web Services.

The voice recognition services of all these smart speakers use algorithms to become more familiar with your use of words and individual speech patterns. It asks the user to perform a 'voice training' , where through reading 25 key commands to your device, the system starts to learn your speech patterns.

Effective speech recognition by a computer is actually a very complex process, especially given the huge variety of different speech patterns. The basis though, is in recognising sections of words known as 'phones', which build into 'phonemes' which we quickly identify as individual words.

Alexa instead has automatic speech recognition (ASR) and natural language understanding (NLU) which allows your Echo smart speaker to recognise these phonemes as words and phrases, allowing it to quickly respond to your request.
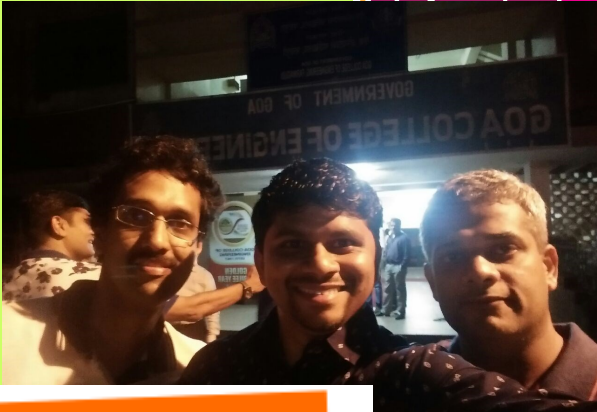
PhotoGALLERY

Alumni Meet 2017

ETC

Department of Electronics &
Telecommunication
College of Engineering, Goa
Farmagudi - Ponda

Tel: 0832 - 2336340

Engineering at its best!

Printed and Published by
Dr. H. G. Virani
Professor & H.O.D. ETC Dept

Layout, Design and Edited By: Samarth Borkar