



DON BOSCO INSTITUTE OF TECHNOLOGY, MUMBAI
DEPARTMENT OF ELECTRONICS AND TELECOMMUNICATION
ENGINEERING

Report on Alumni Talk by Mr. Gaurav Pednekar

Topic: “Product Development and Engineering Design as a Career”

Date: 12th April, 2021

Time: 3:00 - 4:15 p.m.

Venue: Zoom Meeting (Online Platform)

Speaker: Mr. Gaurav Pednekar (Design Engineer Consultant, Capgemini India Tech. Services (Alumnus - Batch of 2015 - EXTC))

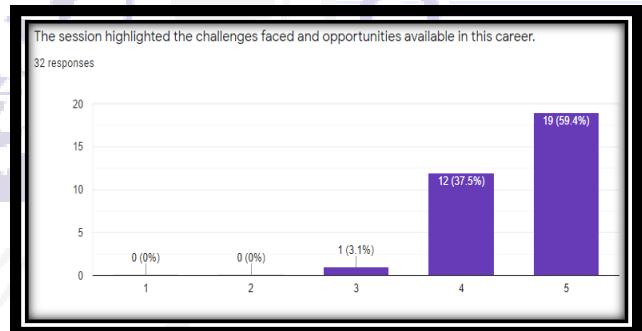
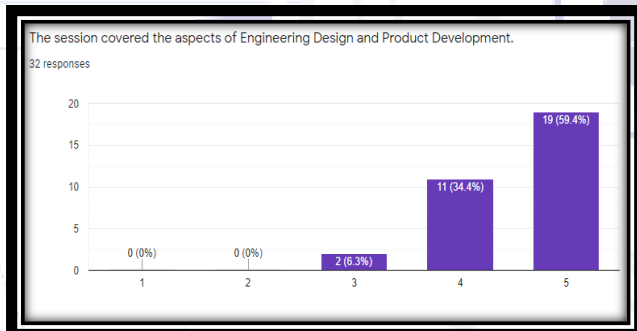
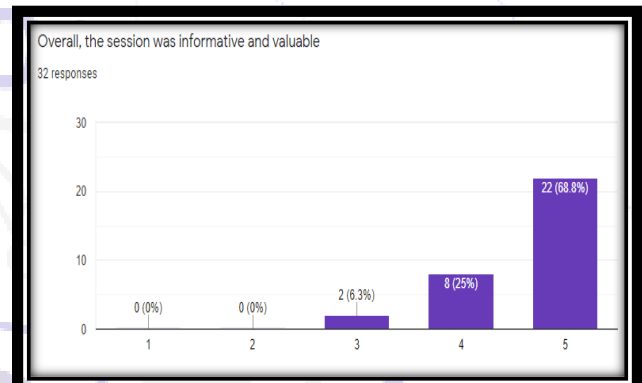
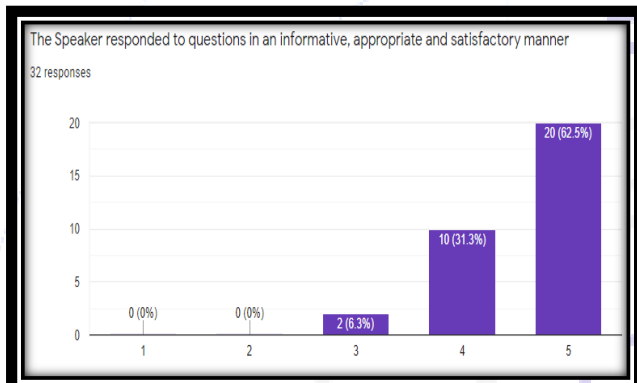
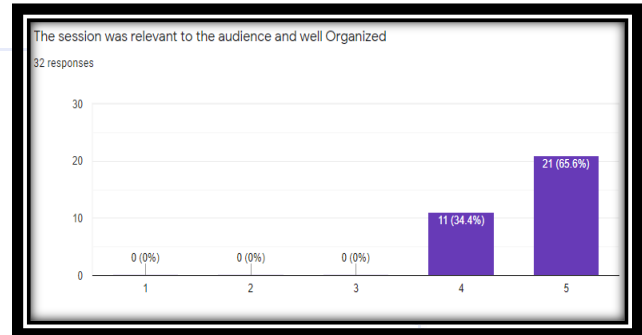
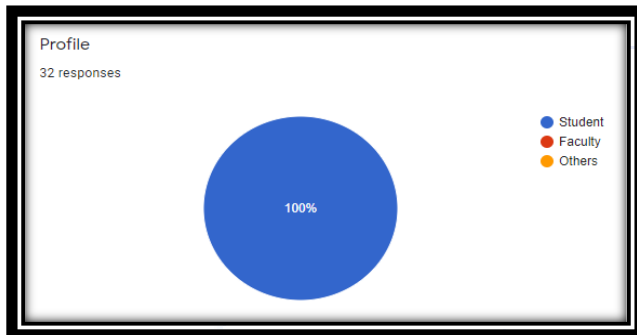
No. of participants attended: 51

Description:

- The EXTC Department of DBIT organized an alumnus talk in collaboration IEEE DBIT Student Branch on “Product Development and Engineering Design as a Career” on 12th April, 2021.
- The session commenced with Ms. Ajitha Rajkumar, the Chairperson of IEEE DBIT SB, addressing the participants and welcoming the speaker for the talk.
- Mr. Ashutosh Rane, Vice-Chairperson of IEEE DBIT SB introduced the speaker, Mr. Gaurav Pednekar who is currently working as a Design Engineer Consultant, with Capgemini India Tech. Services. He is an alumnus of Batch of 2015-EXTC.
- Mr. Gaurav Pednekar started the session by giving a brief introduction about his background in the chosen field.
- He started the session by explaining the use of engineering design for product development and discussed the different stages of prototyping followed in the industry.
- Further, he stated the potential and scope for candidates using statistical data of how only 20-30% of the students are able to secure a job among approximately fifteen lakh engineers who graduate every year.

- Adding to this, he mentioned the technical stages of product development process which comprised of 5-stages.
- The stages for product development process are namely, requirement capturing, problem definition, proof of concept, building prototype, testing and further improvements.
- He went on to describe the approach for electronic hardware design which involves breaking down complex systems into assemblies & sub-assemblies and by finalising number of PCBs and trade-off between modularity and reliability. More number of moving parts would lead to more chances of failure in the hardware.
- He emphasized that simulation prior to getting onto designing is an essential step.
- One can then head to finalising component value and analysing it for all operating conditions using various techniques like FMEA, Monte-Carlo and Worse case circuit analysis to name a few.
- He summarized the technical approach mentioned in the following steps, schematic design, finalising PCB layout stack up, board layout design (placement, routing), peer review of design, manufacturing, visual inspection and reporting any manufacturing defect, soldering, cold check and power-on testing.
- Lastly, he mentioned about the myths and true facts related to salary of product development engineer.
- After the talk, the session was opened to a Q&A round with the participants. The questions were selected from the participants from the zoom call and Mr. Gaurav addressed all of them very meticulously and it was an interactive session for about 20 minutes.
- The session concluded with the vote of thanks delivered by Mr. Utkarsh Likhar, the Alumni Representative of EXTC Department, B.E, after which the participants were requested to fill the feedback forms circulated on the WhatsApp groups and Zoom chat.

Feedback Analysis:



Summary of Webinar Analysis:

From the above analysis we can see the overall reception to the webinar was positive and the participants felt that the overall webinar was satisfactory and informative. As reflected by the feedback, the webinar helped many by gaining clear perspective on Product Development and Engineering Design. A high number of the participants are interested in such future webinars.

Event Poster:



DON BOSCO INSTITUTE OF TECHNOLOGY, MUMBAI

IEEE DBIT STUDENT BRANCH



ALUMNI WEBINAR

**PRODUCT DEVELOPMENT
AND
ENGINEERING DESIGN
AS A CAREER**



MR. GAURAV PEDNEKAR
DESIGN ENGINEER CONSULTANT
CAPGEMINI INDIA TECH. SERVICES
ALUMNUS BATCH 2015

 12th APRIL, 2021

 3 PM TO 4 PM

Contact:
Prof. Gejo George: 9930588001
Ashutosh Rane: 9594632197



Event Pictures:

DON BOSCO INSTITUTE OF TECHNOLOGY, MUMBAI

DEPARTMENT OF ELECTRONICS & TELECOMMUNICATION
&
IEEE-DBIT STUDENT BRANCH

ALUMNI TALK ON
PRODUCT DEVELOPMENT AND ENGINEERING DESIGN AS A CAREER

BY GAURAV PEDNEKAR

DATE: APRIL 12, 2021
TIME: 3:00 P.M.

GAURAV PEDNEKAR

1. JUNE 2015
B.E., ECTC
DBIT, MUMBAI

2. MARCH 2016 - FEB 2017
GRADUATE ENGINEERING
TRANEE, RELIANCE
JIO INFOCOMM LTD

3. FEB 2017 - MARCH 2020
Electronics Hardware Design
Engineer, Tata Power Sed

4. SEP 2020 - FEB 2021
Senior Hardware Consulting Design
Engineer, Embed Square Solution, Pvt Ltd

5. FEB 2021 - PRESENT
Design Engineer, Consultant (B2),
Caggenini India Technology Services

Experience of Gaurav Pednekar

Product Development & Engineering Design

Alumni Talk,
IEEE DBIT SB & Alumni Committee DBIT
April 12th, 2021

Speaker: Mr. Gaurav Pednekar

Scope & Potential

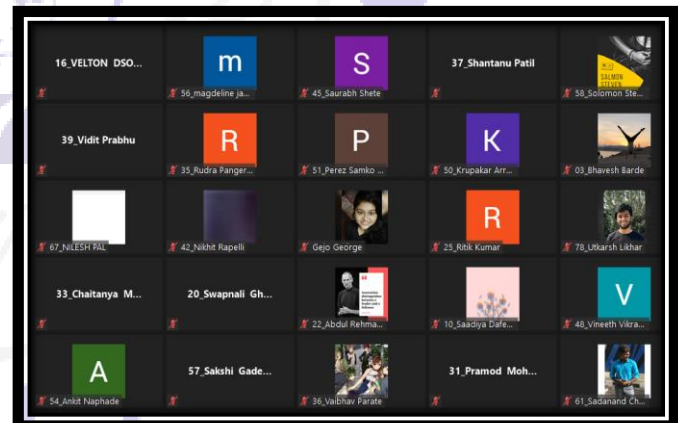
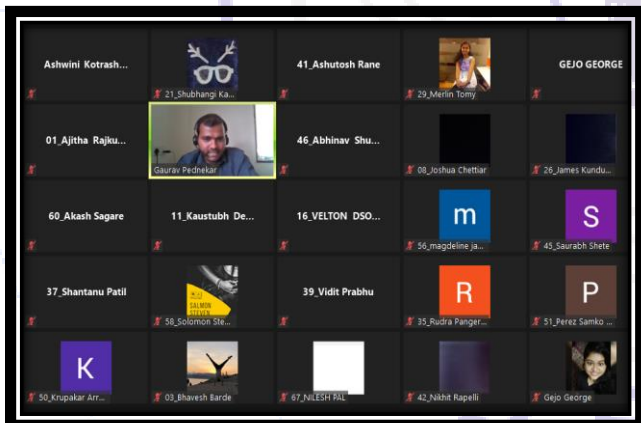
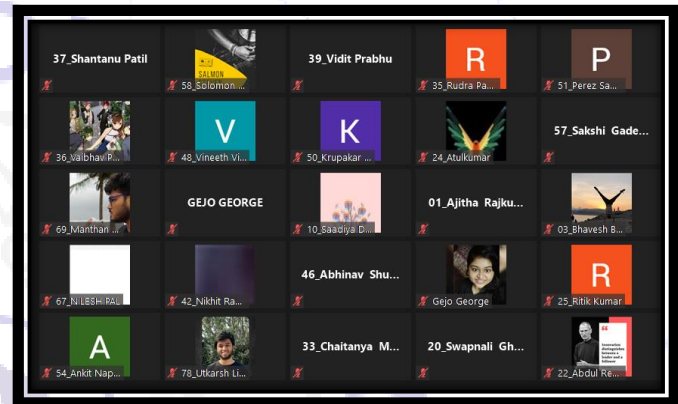
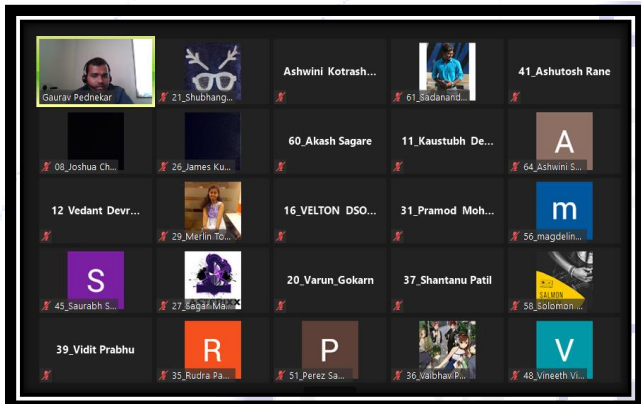
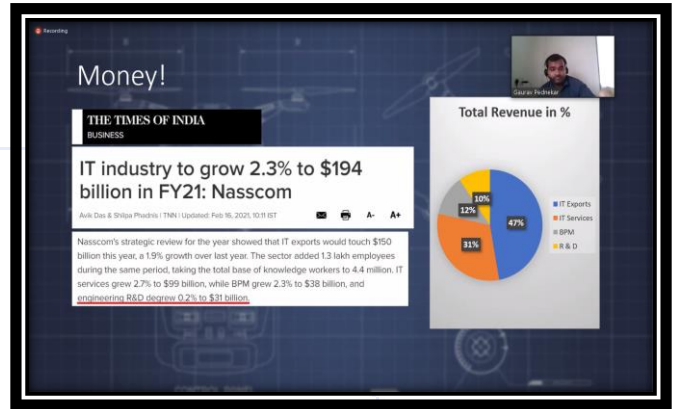
- With almost an average of 15,00,000 Engineering Graduates in India, potential power house for Design Engineering and Innovation.
- But Lack of Skills, leads to only 20% to 30% of them getting a Job.
- Majority are hired by IT services.
- Increased Technical Dependency on Countries like US, Israel.
- China holds firm grip on global manufacturing and product development.
- Still a long way to go

Product Development Process

Requirement Capturing → Problem Definition → Proof of Concept → Building Prototype → Testing & Further improvements

An Approach for Electronic Hardware Design -II

- Schematic Design
- Finalising PCB Layout Stackup
- Board Layout Design (Placement, Routing)
- Peer Review of Design
- Manufacturing
- Visual Inspection and reporting any Manufacturing defect, if any.



Report Prepared by: Ms. Shubhangi Katariyar (Alumni Representative, EXTC Department)

Report Approved by: Ms. Gejo George (Alumni Committee Member & IEEE-DBIT SBC)