



**XAVIER INSTITUTE
OF ENGINEERING**

A SISTER INSTITUTION OF ST. XAVIER'S COLLEGE

PCB DESIGNING WORKSHOP

11TH MARCH 2022

Telecommunication Society Of Xavierites | tsxcommittee@gmail.com

EVENT DETAILS

Event Co-Ordinator's	Telecommunications society of Xavierites
Time	1:30 pm to 4:30 pm
Place	Computer Center
Department	Electronics and Telecommunication
No. of Attendee	32

AIM / OBJECTIVE

The goal of the event was:

1. To teach basics of Printed Circuit Board.
2. To create PCB Design using KiCad Software

RESOURCE PERSON: (Rahul D. Dhebri)

Mr. Dhebri is an alumnus of our very own college Xavier Institute of Engineering who passed out in the year 2020. The domains which he likes to work are Circuit and RF Designing, IoT, Embedded Systems and Additive Manufacturing i.e. 3D-printing. He also has one publication in a well renowned journal IRJET on 'Real-time Analysis of Video Surveillance using Machine Learning and Object Recognition'. Currently, he is working as a Hardware Design Engineer in Aumnatic Systems. Further, he is planning to pursue in Masters in Fall 2022 at University of Ottawa.

SUMMARY:

The workshop 'PCB Designing using KiCad' held under Telecommunication Society of Xavierites (TSX) was conducted on 11th March 2022, at Computer Center, with 42 students and TSX Volunteers in attendance. Our Secretary, Mr. Adwait Joshi initiated the workshop with a brief introduction of our guest speaker Rahul Dhebri.

The speaker began the session discussing the Hardware Design of a Printed Circuit Board (PCB). He then moved on to PCB hardware, where he discusses different types of PCB layers, such as single-layer, double-layer and multi-layer PCB. It keeps track of them as well as the factors that influence them, such as trace spacing and trace built. He then goes on to detail a variety of PCB packaging options, including THT and SMD. He displayed an example on how an actual PCB which is manufactured looks like.

Soon afterward, he moves on to PCB design and suggested a number software, including KiCad, Orcad, Eagle, Mentor Graphics, and others and exclaimed why KiCad is used in industry than other softwares. Later, he clarified us the steps which we have to follow before beginning the process of PCB design, which is seeking up datasheets for components from Digi-Key, Mouser, ICSC and Evelta, among others. He then familiarized the participants with KiCad.

He utilized the buck regulator AP62301Z67 as an example. And showed how to create a circuit schematic layout in Kicad, convert it to a board design, choose the width and size of the routing wires, complete routing, and finally getting us the output in Gerber file. Throughout this practical session, he covered a variety of important subjects, such as using net labels instead of wires for a better aesthetic effect. He also showed how to label the different components.

The workshop was concluded with a vote of thanks from Mr. Adwait Joshi and everyone took a group photo around 4:30 p.m., bringing the workshop to an end.

CONCLUSION:

The workshop covered important aspect; PCB designing. The speaker demonstrates the pre-manufacturing process on designing a PCB of a given circuit using KiCad software.



**Telecommunication Society of Xavierites
Presents
A Workshop on**

PCB Designing

Speaker:

RAHUL D. DHEBRI

Hardware designer at
Aumnatic Systems

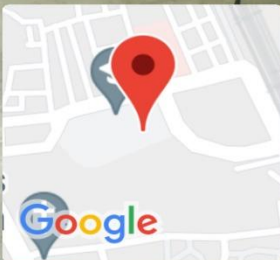


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**Timings: 1:30 pm
onwards**

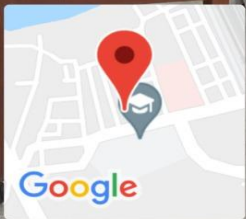
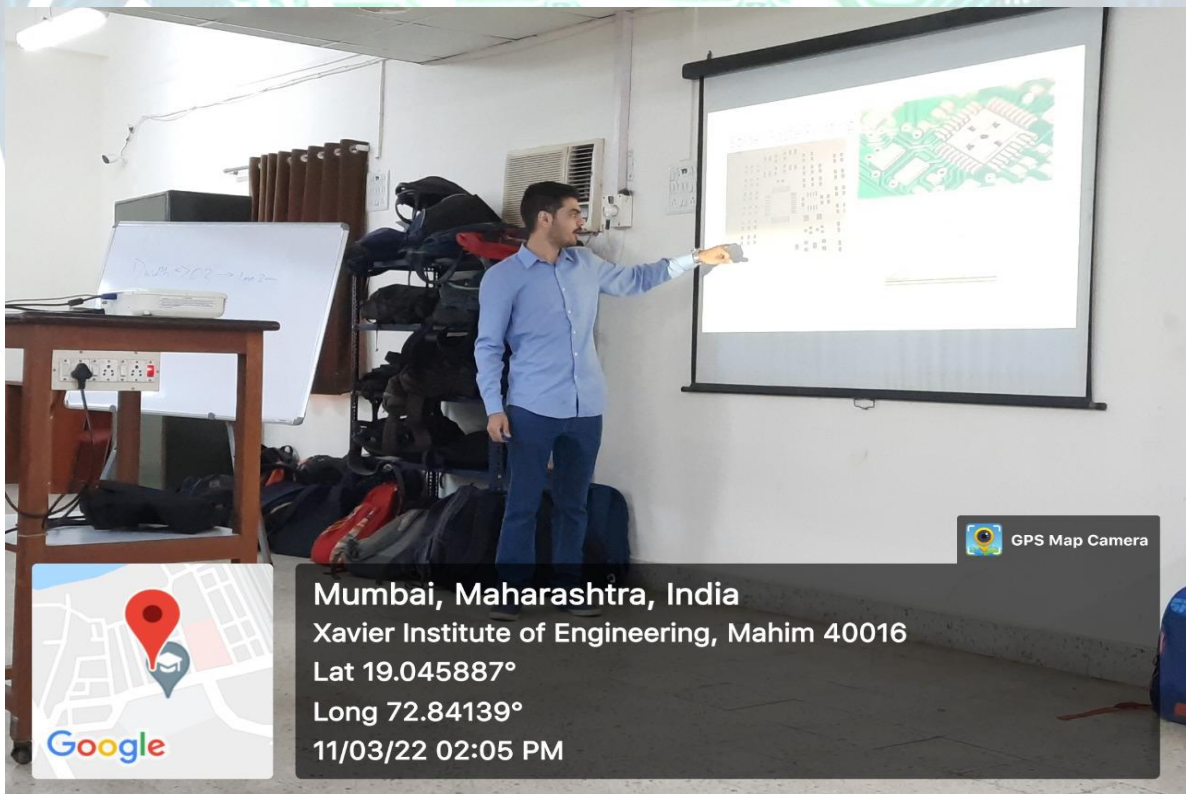
Date: 11.March.2022

IMAGES:





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Mumbai, Maharashtra, India

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FEEDBACK:

The event received overwhelmingly praising comments, and everyone enjoyed the workshop. The audience had high admiration for the speaker and encouraged him to continue holding workshops like this. More electronic based were among the suggestions made by the participants.