Dilip Boidya

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TECHNICAL SKILLS

Hardware tool: QUCS, eSim circuit simulator(KiCad,NgSpice,Spice), i veriloge, CST, LtSpice.
Hardware: Raspberry Pi, Arduino.
Operating Systems: Windows, Linux, Raspbian OS.
Skills:PCB designing, Soldering.

EDUCATION

Bachelor of Technology
Electronics & Communication Engg.
Tezpur University
CGPA 7.37
(2018-2022)

Senior Secondary School
Silapathar Junior Science College
Majgaon, Assam -
Percent 73
(2014-2016)

Secondary School
GOVT. Higher Secondary School,
Likabali, Arunachal Pradesh.
CGPA 8.4
(2012-2014)

LINKS

dilipboidya
dilipboidya
https://omgelectric.blogspot.com/

LANGUAGE

English: Proficient in writing and speaking
Hindi: Proficient in writing and speaking
Assamese: Intermediate
Bengali: Intermediate

COURSEWORK INFO

Main courses: Digital Electronics, Electronic Device and Circuits, Analog Circuits, Electromagnetic Field Theory, Engineering Math.

HOBBIES & INTERESTS

Travelling, Cycling, Watching Movies.

EXPERIENCE & ACHIEVEMENTS

Fellowship - FOSSEE Fellowship IIT Bombay — May 2022 - July 2022
- Learned about eSim (open-source tool) capable of schematic design, device modelling and circuit simulation.
- My job was to model device such as Diodes, LEDs, Transmission lines, etc. and design their symbols and ultimately validate the same.

Marathon - Mixed Signal Circuit Design and Simulation — Duration: 3 weeks
- A step up converter has been designed using eSim and verilog tool, this hardware based marathon was conducted by IIT Bombay, my IP was considered in ”Excellent” category.

Hackathon - Cloud based Analog IC design hackathon — Duration: 3 weeks
- I’ve participated in this hackathon jointly conducted by IIT Hyderabad and VSD Pvt Ltd, powered by Synopsys where I have designed an LNA using synopsys custom compiler tool, my IP was under ”Excellent” category.

Marathon - Circuit Design and Simulation Marathon using eSim — Duration: 2 weeks
- This marathon was conducted in eSim tool using skywater 130nm technology, I was a winner of this marathon, conducted by FOSSEE IIT Bombay and VSD Pvt. Ltd. and my IP was considered in ”Very Good” category.

PROJECTS

Design, Simulation and Fabrication of Coupled Microstrip Line Directional Coupler
Duration: 1 year
- Bachelor’s Thesis
  Directional coupler fulfils the demand of measuring and monitoring microwave power and also isolating, eliminating or combining signals in microwave signal routing and radio frequency.
- Awarded (3rd prize) **Prof. Bipin Dhekial Phukan Memorial Award 2022**, for our final year project.

Deep Learning Based Medical Image Analysis — 6 months
- Mini Project
  There exists many problems in medical image analysis and the interpretation involve the need for computer aided system (Deep Learning, AI, etc.) which study the image structure more precisely.

LDR based streetlight — Duration: 1 week
- Self Project
  • Made a project using NPN transistor and a Light Dependent Resistor (LDR) that would make the LED glow when the surrounding area is dark. It is based on voltage divider principle where LDR is acting as a variable resistor and the transistor is acting as a switch. All the components were assembled as per the circuit diagram and tested a number of times for its perfection.

VOLUNTEERING

TURS - Tezpur University Robotics Society — 2018-2022
- Active member, build my first capacitive sensor using 555 timer IC, Google Assistant IoT project using IFTT and particle.io to triger GPIO of Raspberry Pi.

NSS - National Service Scheme of Tezpur University — 2018-2020
- Organized an essay writting competition on Swachata Pakwada program, guided underprivileged students of upto class 8 in science subjects as a volunteer.