Dilip Boidya

dilipboidya.office@gmail.com | | Vill. Likabali Alikash, Dist. Dhemaji, Assam, India.

TECHNICAL SKILLS

Software Skills: HTML, CSS,

JavaScript, React Library, C++, Python. **Hardware:** QUCS, eSim circuit

simulator(KiCad,NgSpice,Spice), i

veriloge, CST, LtSpice.

microcontroller: 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

5 bitscurrent

in dilipboidya

bitscurrent.github.io/portfolio

• 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

Duration: 3 weeks

Duration: 7 days

Duration: 3 days

 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

• 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

React Calculator

· Self Project

It is simple react app. The source code can be found at https://github.com/bitscurrent/calculator

QuizApp using JS & frameworks like Bootstrap, fontawesome, etc

• Solo Project for Chingu

The webApp fetches data from the API, the link for testing the app is provided below https://bitscurrent.github.io/quizApp-version-2/

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

Duration: 1 week

· 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

· 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.

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.