DHARA PATEL

ELECTRICAL AND COMPUTER ENGINEER

ABOUT ME

An electrical and computer engineering major with a focus in entrepreneurship. Experiences ranging from machine learning to embedded systems to leading teams and starting a company have all contributed to a well rounded background and mindset that can learn quickly by doing.

EDUCATION

OLIN COLLEGE OF ENGINEERING NEEDHAM, MA

BS in Electrical and Computer Engineering GPA 3.64 May 2022

SKILLS

Embedded Systems

- C/C++
- 12C / SPI
- ARM / STM
- Azure

Hardware

- KiCAD / Altium
- EE Benchwork
- PCB Design
- LTSpice
- PLECS

Software

- Python
- Java
- Linux
- Matlab

CONTACT ME

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in /dhara-p

/dharaspatel

EXPERIENCE

OSSTP Research Group

Link Budget Subteam | Jan 2021 - Sept 2021

GOAL: Create satellite link budget assessment tool to design and validate link budgets and perform interference analyses

IMPACT: Design and implementation of LB tool in Python

WATTS WATER TECHNOLOGY

Electrical Engineer | May 2020 - Dec 2020

GOAL: Reinvent plumbing by enabling water systems to send and receive data via the Internet IMPACT: Building deployable boards that use MQTT to send sensor data and receive user input through Azure

NASA THINSAT MISSION

Electrical Engineer | June 2019 - Sept 2019

GOAL: Deploy 3 ThinSats defined by the UAF for NASA's NG13 mission slated for a Dec '19 launch IMPACT: Designed and programmed complete electrical system using C++

NASA GODDARD SPACE CENTER

Software Engineer | Jan 2018 - Feb 2018

GOAL: Improve Lessons Learned database by reinventing the site for ease of use IMPACT: Used HTML to create a better user interface and Python to organize the database

PROJECTS

OLIN ROCKETRY AVIONICS

Hardware and Power Lead | Aug 2019 - Present

GOAL: Build a sounding, L3 rocket to compete at the 2020 IREC competition at the 10,000 ft IMPACT: Designing the battery management system and managing all avionics hardware

BRAIN MACHINE INTERFACE STUDY

Project Lead | Aug 2021 - Present

GOAL: Create a compact, easy-to-use brain machine interface using EMG for disabled persons to more easily use technology.

IMPACT: Designing and building the entire brain machine interface using Python and deep learning

BEAM BARS

Electrical Engineer | Oct 2019 - Jan 2020

GOAL: Electro-mechanical instrument that uses lasers to generate digital sound

IMPACT: Built the electrical system which generates sound using ADC and control/sense lasers using KiCAD

GOD'S EYE MODELING

Co-founder | Aug 2019 - Jan 2020

GOAL: Al model that applies image processing to missing persons and criminal investigation IMPACT: Built a deep learning model that can detect an image's location using Python's Tensor Flow