

# Pranavi Boyalakuntla

Electrical and Computer Engineer

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<https://pranavi.space>

Github: naviatolin

## EDUCATION

### Stanford University

M.S. Electrical Engineering, GPA: N/A

Palo Alto, CA

SEP 2022 - PRESENT

- Candidate for M.S. in Electrical Engineering
- Focus in networks, wireless communications, and embedded systems

### Franklin W. Olin College of Engineering

B.S. Electrical and Computer Engineering, GPA: 3.8

Needham, MA

SEP 2018 - MAY 2022

- Olin College Half Tuition Merit Scholarship (2018 - 2022)
- Courses: Wireless Communications, Software Systems, Computer Architecture, Computation Theory

## EXPERIENCE

### Meter

Embedded Platform Engineering Intern

San Francisco, CA

JUN 2022 - SEP 2022

- Building tooling to support Meter in C
- More to come once I start

### Olin Satellite + Spectrum Technology & Policy Group (OSSTP)

Research Assistant

Needham, MA

JAN 2021 - PRESENT

- Designed link budget analysis tool in Python to calculate and validate link budgets and perform interference analysis
- Lead team analyzing FCC Auction 107 (C-band) data for a lab corporate partner
- Developed content for Olin College Principles of Wireless Communications course and textbook
- Iterated on an Antenna Control Unit (ACU) design for Mangata Networks
- Validated interference mitigation compliance from satellite mega-constellations (OneWeb, Telesat, SpaceX) using I/N metrics

### 248 Builders (Previously Green Line Ventures)

Founding Partner

Needham, MA

NOV 2019 - JUL 2021

- Founded pre-seed fund designed to promote student led startups in the Babson-Olin-Wellesley community
- Worked with VC firm 500 startups to design how the fund will operate and made first investment into TicketRev
- Meeting founders, writing executive summaries for investment, and creating marketing materials

### Promaxo

Systems Engineering Intern

Oakland, CA

JUN 2019 - AUG 2019

- Lead team automating high precision collection of magnetic field measurement data for image reconstruction in 3D space surrounding the Promaxo MRI
- Created an API to communicate with Festo motor controllers using Modbus communication protocol
- Built and debugged a programmable logic controller (PLC) to handle the logic of the Promaxo MRI
- Contacted manufacturers to source parts for electrical research and development

### Dassault Systèmes: SolidWorks

Fabrication Laboratory (FABLAB) Intern

Waltham, MA

JUN 2017 - AUG 2017

- Obtained certification as a SolidWorks Associate in Mechanical Design (CSWA)
- Developed company Arduino guide to introduce non-technical employees to the FABLAB and the electronics station

## AWARDS

- Clare Boothe Luce Research Award (2021-2022)
- Massachusetts Space Grant Undergraduate Research Award (Summer 2021, Fall 2021)

## PUBLICATIONS

- Boyalakuntla, P., Goldwater, M., Gupta, U., Lohmeyer, W.Q., Govindasamy, S., (2022) An Undergraduate-level, Problem-based Introduction to Orthogonal Frequency-Division Multiplexing, IEEE Frontiers in Education (FIE), Uppsala, Sweden, 8 - 11 October 2022.
- Lohmeyer, Whitney, and Govindasamy, Siddhartan. "OFDM Overview", Principles of Wireless Communications, (In Publication).

## SKILLS

### Hardware

- KiCAD
- PLECS
- SDR
- LTSpice
- FPGA
- SolidWorks

### Software

- C
- OCaml
- R
- Python
- MATLAB
- Verilog

### Other

- Soldering
- Data Science
- Figma
- Technical Writing
- Agile Scrum