Anusha Datar

San Francisco, CA
anushadatar.com

WORK EXPERIENCE

Meter — *Embedded Software Engineer*

JAN 2021 - PRESENT

- Develop vertically-integrated software for network features, the operating system (**buildroot/openwrt**), and the provisioning processes powering **Wi-Fi** access points, network controllers, and network switches in **C**, **Lua**, **Rust**, **Go**, and **Python**
- Work with manufacturers on hardware selection, procurement, and customization
- Handle customer issues and requests on live wireless networks
- Scale processes as team size, company size, and operational capacity grows

Google — *Software Engineering Intern*

SUMMER 2020

- Used **C++** and **Rust** to develop **Bluetooth** stack emulation capability (basic rate and extended data rate) for novel, open-source Fuchsia OS.

Microsoft — *Devices Software Engineering Intern*

SUMMER 2019

- Built **C#** software interfaces and tools to automate optical validation for device displays as part of the Manufacturing Test Engineering ecosystem..

Silicon Labs — *Applications Engineering Intern*

SUMMER 2018

- Developed customer-facing solutions and in **C** with a focus on **ZigBee 3.0** wireless network security for microprocessor/radio modules.

MITRE — *Embedded Software Intern*

SUMMER 2017 - JAN 2018

- Created **Python** and **C++** real-time wireless signal analysis tools and platform abstraction frameworks for GNSS systems. Carried secret clearance.

Olin College of Engineering — *IT Technician and TA*

SEPT 2017 - JUNE 2021

- Hold office hours, provide feedback/guidance, and assist with grading for **Data Structures and Algorithms**, **Machine Learning**, **Analog and Digital Communications**, **Analog Electronics** and **Neurotechnology**.
- Diagnose, repair, and maintain client devices, IT equipment, and Wi-Fi networks.

EDUCATION

Olin College of Engineering — *Electrical and Computer Engineering*

Recipient of Four-Year, Half-Tuition Merit Scholarship

SEPT 2017 - JUNE 2021

Relevant Coursework: Data Structures and Algorithms, Software Systems, Computer Networks, Computer Architecture, Circuits, Electronics, Data Science, Digital Power Conversion, User-Oriented Collaborative Design

Activities: Human Augmentation Lab (Researcher, Signal Processing and Brain-Computer Interfaces), Student Government (President), Stay Late and Create Leadership, Amateur Radio, Student Newspaper

SKILLS

Programming Languages: *Strongest:* C, Python, Java, MATLAB, C++ *Have Professional Experience In:* Lua, Rust, Go, C#

Technical Specialties: Embedded Development, Linux Kernel, Wireless Networking (Bluetooth/ ZigBee/Wi-Fi)

Other: Electronics Design/Fabrication, HAM Radio (Extra Licensed), Basic CAD, Laptop Diagnostics and Repair (Dell Certified)

PROJECTS

- Brain Computer Interfacing Research with **MATLAB** and **Python**
- Air quality monitoring and mitigation for advocacy groups in East Boston - **electronics**, **fabrication**, **C**, and **Python**
- Mechatronic CNC PCB mill - **electronics**, **fabrication**, **C**, **python**
- Wrote unix shell and text editor - **C**, **Linux kernel**

See additional work samples at https://anushadatar.github.io/