Anusha Datar

San Francisco, CA
anushadatar.com

WORK EXPERIENCE

AirGarage — Embedded Software Engineer

MAY 2023 — PRESENT

- First dedicated hardware engineer. Build capacity to cost-effectively automate parking management (integrate **sensors**, **cameras**, and **cellular modems**).
- Lead team meetings and set product direction
- Design, prototype, manufacture, install, and maintain bespoke hardware and software systems (using **KiCad**, **3D printing**, **soldering**, **fabrication**)
- Write firmware and software for device functionality, cloud/database interaction, and observability/fault detection (**Python, Linux, Django, Bash, SQL**)
- Create data visualization and alerting tools to monitor and improve deployments
- Scale up supply chain, manufacturing, setup, and installation network from supporting a single hardware testing site to 50+ production devices nationwide

Meter — Embedded Software Engineer

JAN 2021 — MAY 2023

- Developed 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**
- Worked with manufacturers on selecting, vetting, and customizing hardware
- Handled customer issues and requests on live wireless networks
- Scaled products/processes as team/company size and operational capacity grows

Google — Software Engineering Intern

SUMMER 2020

- Used **C++** and **Rust** to develop **Bluetooth** stack emulation capability for Fuchsia OS

Microsoft — Devices Software Engineering Intern

SUMMER 2019

- Built **C#** software interfaces and tools to automate device manufacturing

Silicon Labs — Applications Engineering Intern

SUMMER 2018

- Solved customer problems in **C** with a focus on **ZigBee 3.0** wireless network security

MITRE — Embedded Software Intern (Secret Clearance)

SUMMER 2017 — JAN 2018

- Created **Python** and **C++** real-time wireless signal analysis tools and frameworks

EDUCATION

Olin College of Engineering — Electrical and Computer Engineering

SEPT 2017 — JUNE 2021

Relevant Coursework: Software Systems, DSA, Computer Networks, Computer Architecture, Circuits/Power Electronics, Data Science, ML, Design
Teaching Assistantships: Data Structures and Algorithms, Machine Learning, Analog and Digital Communications, Analog Electronics, and Neurotechnology.
Activities: Human Augmentation Lab (Researcher, Signal Processing and Brain-Computer Interfaces), Student Government (President), IT technician

SKILLS

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

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

Other: Electronics Design/Fabrication, Soldering, HAM Radio (Extra Licensed), Basic CAD, Laptop Diagnostics and Repair, Rapid Prototyping

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**