Anusha Datar

WORK EXPERIENCE

AirGarage — Embedded Software Engineer

MAY 2023 - PRESENT

- First dedicated hardware engineer. Build hardware capacity to cost-effectively automate parking management (integrate sensors, cameras, and cellular modems)
- Design, manufacture, install, and maintain bespoke hardware and software systems (using **KiCad, Autodesk Fusion, rapid prototyping, fabrication**)
- Write firmware and software for device functionality, cloud/database interaction, and observability/fault detection (**Python, Linux, Django, Bash, SQL**).
- Scale up supply chain, manufacturing, setup, and installation network from supporting a single hardware testing site to 50+ installations nationwide.
- Lead team meetings and set product direction

Meter — Embedded Software Engineer

IAN 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 Recipient of Four-Year, Half-Tuition Merit Scholarship

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/Fabricatio n, 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