Michael Mehl

98 Hammonds Lane Apt 213 Brooklyn Park, MD 21225
michaelalanmehl@gmail.com | https://github.com/mikemehl | https://mikemehl.com

I am a software engineer who loves his craft. My primary driving force as an engineer is curiosity, and I take deep pride in my background knowledge in the roots of computation and mathematics. I am passionate about open source software and the Linux ecosystem. I am looking for a position where I can make an impact while growing my knowledge and skills.

Experience

Very An IoT product development firm.
Firmware Engineer | *August 2021 - Present* | *Remote*
I worked on the firmware for several IoT products for various clients, including utility, air quality, safety, and industrial applications. As a solo firmware engineer on most projects, I worked closely with hardware engineers, web developers, and graphic designers to develop new products and write firmware that meets clients' needs, while keeping a holistic system perspective. This role also featured daily client interactions and travel for integration sessions.

- Utilized Buildroot and Nerves/Elixir in the development of an air quality monitoring system for a custom hardware platform utilizing a Quectel cellular modem to connect with AWS. This system was used to add connectivity to an existing line of products. Included integration with a third party OTA platform.
- Improved the performance of a bare metal embedded system for a preseed client. The product was an IoT utility monitoring system built on an ESP32 based platform, utilizing a LoRa radio. After successfully improving their system, the client was able to secure seed funding and successfully bring the product to market.
- Developed test firmware to aid with production line verification of functionality.
- Aided clients in preparing their products for FCC and UL certification.

Northrop Grumman A Department Of Defense and Aerospace contractor.
Embedded Software Engineer | *July 2017 - August 2021* | *7323 Aviation Blvd Baltimore, MD 21240*
I worked on the embedded software for several large radar systems, with areas of functionality including signal processing, radio control, target tracking, and data transport. As a key engineer on the team, I worked closely with systems engineers to implement new algorithms, perform lab testing, and improve performance.

- Architected and implemented a new search and target tracking algorithm in C++. The algorithm involved partitioning of the search volume to utilize cutting edge hardware capabilities. Worked closely with systems and integration engineers to implement the algorithm, develop host based test systems, optimize for the target platform, and verify functionality during integration.
- Worked with a team to port a legacy radar system new hardware, including updating the software from a VxWorks based system to a custom Linux distribution.
- Developed a testing application for replaying recorded radar data, allowing for rapid development and testing of new algorithms from user workstations. This helped several engineers deliver early by allowing them to work independently from the integration lab.

Anne Arundel Community College Educational institution.
Mathematics Tutor | *August 2016 - July 2017* | *101 College Pkwy Arnold, MD 21012*
I tutored students at AACC's Math Lab, a walk in tutoring environment. I helped students to master the skills necessary for success in all mathematics subjects, from basic algebra to differential equations.

Education

University of Maryland, Baltimore County
B.S. in Computer Science | B.A. in Mathematics
1000 Hilltop Cir Baltimore, MD 21250
GPA: 3.8

Anne Arundel Community College
A.S. in Computer Science | A.S. in Mathematics
101 College Pkwy Arnold, MD 21012
GPA: 3.7

Skills

Languages	Platforms	Tools
C	Linux	Git
C++	Buildroot	Jira
Python	Nerves	CircleCI
Lua	Zephyr	GH Actions
Bash	AWS IoT	Docker
Rust	Cellular	Caddy
Go	LoRa	Ansible
Elixir	ESP32	GDB
Scheme	IMX6	