

## Dennis Smith

GitHub: Dennis-Smith414 | Personal Site: dnstech.xyz

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### PROFESSIONAL SUMMARY

Computer Science student at UW-Milwaukee and C Programming Intern passionate about embedded systems, networking protocols, and full-stack development. Experienced in firmware with PIC microcontrollers, networking protocols, and enterprise Linux servers. Developed a real-time Meshtastic network monitoring web app and Debian based home server. Proficient in C, Java, JavaScript, Python and diverse tools. Aiming to leverage technical skills and hands-on projects to launch a software development career post-graduation in December 2025.

### EDUCATION

#### Bachelor of Science, Computer Science

University of Wisconsin-Milwaukee

December 2025

Milwaukee, WI

### SKILLS

Programming: C, Java, JavaScript, Python, BASH, MIPS Assembly, HTML/CSS, UNIX, Scrum, Django, Next.js

Software: Git, SVN, Nginx, Linux, Microsoft Office Suite

Engineering Tools: Soldering, Logic Analyzers, Oscilloscopes, Spectrum Analyzers, FreeCAD, 3D Printing

Hardware: PIC, esp32, radio equipment, PC building/repair

Networking: TCP/IP, UDP, MQTT, 802.11, FTP, SMTP, DNS, LoRa, Ethernet

### PROJECT EXPERIENCE

#### Open Meshtastic Monitor

December 2024-Present

- Created a web app using Next.js that allows for real-time monitoring chat logs, GPS data and battery life on Meshtastic network
- Implemented MQTT protocol to allow for a gateway node to be connected to the user's PC for internet-based data transmission and storage on a remote server

#### Home Server

December 2024-January 2025

- Built and maintain a Debian 12 server featuring the hosting of a personal website, email, encrypted backups, file-sharing and network-wide ad-blocking
- Implemented robust security features, automated tasks with bash scripting

#### TA Scheduling App

November 2024-December 2024

- Used Django to create a web app that allows for management of academic instructors and their information
- Worked in a small team using Scrum for project management and utilized GitHub for version control and workflow efficiency

#### MIPS-RISA-Simulator

April 2024-May 2024

- Used java to emulate functionality of fifteen MIPS processor components in a single cycle data path
- Collaborated with a teammate to write and debug code, used GitHub to ensure seamless workflow

### WORK EXPERIENCE

#### Intern C Programmer, Custom Computer Services, Waukesha WI

May 2024-Present

- Developed firmware for the W5500 Ethernet module, on PIC microcontrollers
- Built and maintained enterprise Linux server with company-wide file-sharing, email, SVN and security features
- Worked with clients to create firmware revisions to fit their individual needs
- Worked with various tools such as logic analyzers, oscilloscopes, spectrum analyzers to diagnose issues with hardware
- Represent company at trade shows and HAM radio conventions

### ACTIVITIES

Licensed Amateur Radio Operator, Technician Class

July 2024-Present

IEEE-CS@UWM Member

September 2022-Present

UWM Student Association Senator

September 2022-May 2023

Eagle Scout, Boy Scouts of America

Achieved May 2018