

TINU VANAPAMULA

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ABOUT ME

I'm a sophomore studying Computer Science at the University of Maryland, with a strong passion for technology. My current interests lie in software engineering, data analytics, and server management. I thrive on tackling challenges and enjoy researching and engineering creative solutions. In my free time, I maintain a home lab and build software I find useful.

SKILLS: Python, Typescript/Javascript, Java, C/C++, React, Next.js, Node.js, Linux, Git, Docker, HTML, CSS, Tailwind, Django, FastAPI, Pandas, Matplotlib, MATLAB, Scikit-Learn, SQL, Microcontrollers, Technical Writing, Problem Solving, Critical Thinking.

EXPERIENCE

National Institute of Health (NIH) Contract through IntraNav | Bethesda, MD • Part-Time IT Technical Support
August 2023 - Present

- Provide onsite support to the NIH by troubleshooting IntraNav IoT devices to ensure minimal downtime
- Solve numerous bugs and issues by updating and servicing IntraNav Ubuntu servers and UWB radios

Johns Hopkins University Applied Physics Laboratory (JHU APL) | Laurel, MD • ASPIRE Intern
June 2023 - August 2023

- Developed an autonomous robot to track WiFi APs using an Arduino and ESP8266
- Designed a basic autonomy algorithm using gyroscope/ultrasonic sensors to aid the efficient movements of the robot
- Designed and developed serial and web endpoints to communicate between client devices and the robot

University of Maryland (UMD) MIND Lab | College Park, MD • Research Intern
June 2023 - August 2023

- Collected 25+ respiratory breathing data samples through controlled experiments and SPIRE health tags
- Trained a rudimentary predictive machine learning model using Python data science libraries

International Software Systems Inc. | Greenbelt, MD • Software Development and IT Intern
June 2022 - August 2022

- Developed and deployed full-stack web applications using Django, Next.js, GraphQL, AWS EB/EC2, and Docker
- Increased WiFi coverage by 50% by generating heatmaps of Unifi access points to optimize access point location

EDUCATION

University of Maryland, College Park (UMD) • Bachelor of Science in Computer Science
Sophomore Graduating December 2026, GPA: 4.0
Dean's Scholar, BSE Scholars Program

Montgomery Blair High School • Science, Mathematics, Computer Science Magnet Program
WGPA: 4.96, GPA: 4.0

PROJECTS & ACHIEVEMENTS

- Developed Grade Melon (An app that reverse-engineered our school's grades portal for a better UI/UX and calculating/optimizing grade features. This app received 1M+ unique visitors during its lifetime)
- Led the development and designed the UI/UX + Infra of the Montgomery Blair High School Website (mbhs.edu)
- Multiple Awards at Hackathons / App Challenges (Best UI Hack @ Mocohacks 2021, Best in Show @ Codeday DC 2022, Public Favorite @ poolesville_hacks 2 2023, Congressional App Challenge Winner in MD-03 2019 & 2020)