Atheesh Thirumalairajan

atheesh t@icloud.com • about.atheesh.org • linkedin.com/atheesht • github.com/candiedoperation • Seattle, WA

EDUCATION

University of Maryland | Department of Computer Science

B.S. in Computer Science (GPA 3.9/4.0, CS Honors Program)

May 2026

College Park, MD

SKILLS AND CERTIFICATIONS

- Cisco Certified Network Associate (CSCO14419669 Verify Certification)
- Computer Networking: Routing Protocols, QoS, IPv4, IPv6, Ethernet Standards, NAT, VLANs, STP, Wireless LANs, Cisco SDN and VRF
- Software Development: JavaScript (ReactJS, NodeJS, Electron, React Native), Java, Rust, C/C++, Rust, Python, Vala
- System Administration: Proxmox, ZFS, RAID, Dell PowerEdge Server Configuration, iDRAC9, VirtualBox, Docker Containerization, Samba-based and Windows-based Active Directory Services, Apache Web Servers, BackupPC, Mailcow

EXPERIENCE

Children's National Hospital – Fifth Largest Children's Hospital in the US

Jan, 2024 - May, 2024

Washington, D.C.

Software Engineering Lead

- Selected by the university's AppDev Club as one among the **top 10 people** out of the **400+ applicants**.
- I lead a thirteen people team to develop a WebApp that quantifies cervical range of motion for children with injuries to their neck and spines. With over **9000 lines of code**, the project will impact over **15,000+ patients** and stakeholders yearly. My team decides the Tech Stack, designs and deploys the front-end (ReactJS) and the back-end (NodeJS), models databases (MongoDB), implements video live-streaming (NodeJS MediaSoup Library) and Docker containerization. (See Demo Here)

App Development Club – Most competitive club at the University of Maryland, College Park Director of Technical Innovations

Jan, 2024 - Present

College Park, MD

- I lead a six person team that creates new products and services for the club's internal use in areas ranging from Talent Acquisition to Stakeholder Interaction. Furthermore, I lead talent acquisition for Technical Innovations, designed interviews and selected the best people from a highly competitive pool of 300+ applicants. (Learn More Here)
- With over 150 members, the club has built software for Fortune 500 companies like Amazon, General Dynamics, MITRE and US News. In a six-month timeframe, the club built software worth over \$500,000.

Veeyes Foundry Private Limited – Industrial Company that produces over 750 tons of alloys annually Software Systems Intern

Aug 2021 - Nov 2021

Coimbatore, India

- Created a Cloud Print Solution and an Android App that helped employees instantly transfer documents scanned using their phone without traditional methods like Email and USB File transfer.
- Enforced security and configured uniform organization-wide group policies by deploying a Samba based Active Directory Server, Deployed services like NextCloud and Bitwarden as Docker Containers on a Linux Server to help employees store and share files and passwords safely.

Office of R. Ramalingam, Chartered Accountant – Taxation Firm with over 150 clients

Oct 2020 - Apr 2021

Information Systems Intern

Coimbatore, India

Optimized compute, storage, and uptime using VirtualBox Virtual Machines, Deployed a BackupPC based Centralized Backup Solution on Ubuntu (Linux), Equipped the Organization for secure Work from Home by deploying VPN Servers based on OpenVPN, Helped employees install legitimate apps creating a **Java App** which elevates the user based on an instant approval request sent to the System Administrator.

LEADERSHIP

Bitcamp 2024 – The East Coast's largest collegiate hackathon

April, 2024

Mentor and Judge

College Park, MD

I mentored 30+ teams on all parts of the software development lifecycle and I was a part of the judging panel that selected the best project from over 40 projects under the App Development Track.

Autonomous Rover Project – Part of an Engineering Design Course Team Lead

Aug, 2023 – Dec, 2023

College Park, MD

I led an 8-member team as a part of an Engineering Design course at the University of Maryland to create components and software for an autonomous rover that navigates obstacles and completes missions in an assigned arena.

PROJECTS AND RESEARCH

- Actively developing tacOS, an x86-64 operating system using C++ and Assembly. Wrote the kernel from scratch with implementations for Multiboot Compliance, Physical and Virtual Memory Management and support for ACPI, IO/APIC, Text Video output, Keyboard Input and Kernel interrupts. (See GitHub Repo Here)
- Developed SpifyRFB, A VNC (Remote Desktop) Server written from scratch with Rust. Interacts directly with X11 and Win32 (GDI, Services, Remote Desktop) APIs, Supports TCP, WebSocket. Runs as a service for persistent connection during Logon Screens and UAC Prompts. Supports concurrent RDP and console sessions. (See GitHub Repo Here)
- Fixed OpenProject's docker-compose.yml to support deployment using the Portainer container management interface. Fixed Veyon's API to ignore case-sensitivity in HTTP Headers for API usability in NodeJS. Added "Dynamic FlatHub Links", a convenience feature, to elementaryOS AppCenter. Maintainers merged it to the Global Major Release.
- Part of the highly competitive First-Year Innovation and Research Experience program at the University of Maryland, Working on a research paper that involves "Evaluating the effectiveness of Generative AI tools in assisting computer network design and deployment"
- Reached over **45,000 People on StackOverflow** with 60+ Answers, 20+ Badges and **810+ Reputation**. Privileged to Upvote, Flag, Review Questions and Answers on the Platform (See Statistics Here).