

Timothy Vu

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EDUCATION

Cornell University

Master of Engineering in Computer Science

Ithaca, NY

Expected December 2024

Cornell University

Bachelor of Science in Computer Science

Ithaca, NY

Expected May 2024

EXPERIENCE

Microsoft

Site Reliability Engineer Intern

May 2023 – July 2023

Reston, VA

- Automated renewal and rotation for 90+ certificates in Azure Key Vault, eliminating manual intervention
- Transitioned certificates from thumbprint-based authentication to more secure subject name and issuer method
- Implemented an efficient auto distribution system for certificates, enhancing scalability and availability by automatically deploying them to 10,000 Azure service nodes

Microsoft

Site Reliability Engineer Intern

May 2022 – August 2022

Reston, VA

- Created a real-time centralized metrics dashboard tracking latency, availability, and utilization of government cloud deployment tool, enabling data driven decision making
- Replaced manual log checks with automated email notifications, reducing incident resolution time by 50%
- Presented actionable insights on key performance indicators based on dashboard data to senior management

U.S. Department of Defense

Software Engineer Intern

June 2021 – August 2021

Springfield, VA

- Upgraded department SharePoint page to enhance appearance and functionality using JavaScript for 100+ personnel while serving as principal SharePoint administrator
- Improved access request workflow for SharePoint permissions, reducing waiting time and manual approvals

Modus Create Inc

Software Engineer Intern

May 2020 – August 2020

Reston, VA

- Developed Amazon Web Services tool automating temporary third-party remote access to internal VMs
- Built a demo website to showcase Vue 3 and Ionic 5 for presentation to potential Fortune 500 clients
- Authored technical tutorials on topics such as AWS, Vue, and JavaScript for company blog and Medium

PROJECTS

AWS Instant Tunnel | *JavaScript, Python, Lambda, DynamoDB*

- Developed an AWS tool automating temporary SSH access to EC2 instances
- Wrote AWS Lambda functions for user authentication, EC2 instance management, and database operations
- Used DynamoDB to store temporary permission information

Twutor | *HTML/CSS, Node.js, Express.js, MongoDB*

- Built a tutoring networking site which matches students and tutors based on expertise
- Utilizes MongoDB to store user data and Express.js/Node.js backend
- Employs Bootstrap CSS and Handlebars for dynamic rendering

SKILLS

Languages: Java, Python, C, C#, SQL, JavaScript, HTML/CSS

Developer Tools: Git, VS Code, Visual Studio, PyCharm, IntelliJ, Eclipse

Certifications: AWS Certified Developer Associate, AWS Certified Solutions Architect Associate, Microsoft Azure Fundamentals, CompTIA Security+, CompTIA Network+