Jason Nguyen

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EDUCATION

Lawrence Technological University   **Southfield, MI**
Bachelor of Science in Computer Science   Expected Graduation: May 2026
- Cumulative GPA: 3.40
- Dean's List: 2 Semesters

WORK EXPERIENCE

BorgWarner Inc.   **Auburn Hills, MI**
IT Infrastructure Automation Intern   Jun 2025 – Present
- Develop infrastructure-as-code for cloud resources using Terraform and Ansible, streamlining provisioning, configuration, and creation of Azure resources, enabling scalable infrastructure deployment across multiple regions
- Implemented automated cloud backup infrastructure and solutions using Terraform and Azure, improving data protection, reducing manual intervention by 30%, and enabling secure and scalable backups for SQL Servers and PostgreSQL workloads
- Built and maintain cloud automation and CI/CD pipelines using Terraform Cloud, Red Hat Ansible, GitHub, and Azure, accelerating deployment cycles, improving reliability in production, and reducing costs by 15%
- Collaborate with global IT teams to standardize cloud infrastructure automation practices and drive operational efficiency

Lawrence Technological University   **Southfield, MI**
Research Assistant   Feb 2025 – Present
- Researching on the personalized real-to-sim to real-navigation with Gaussian Splats from a mobile device, with Department Chair of Math and Computer Science, Eric Martinson, on the temporal side of scanned environments
- Conducts experiments with the Unitree Go2, using ROS, collecting sensor data in Excel to simulate applications in condition monitoring with Professor Wisam Bukaita to research robotic perception using LiDAR for mapping and obstacle avoidance

Student Assistant   May 2025 – Jul 2025
- Assist 12+ students in designing 3D models using CAD and facilitate operation of 3D prints to fabricate physical prototypes
- Guides 20+ students in programming Python through coding challenges and robotic simulations

Teaching Assistant   Jan 2025 – May 2025
- Supports 40+ students in understanding concepts of Calculus I & II, including limits, derivatives, integrals, and sequences
- Leads lab sessions introducing statistical analysis and data visualization using R programming on how it compiles and executes

The Blue Times Student Newsletter   **Southfield, MI**
President   Nov 2023 – Present
- Compiles reports that focus on giving opportunities, updates, and insights for Lawrence Tech students and faculty
- Coordinates team meetings, editorial calendars, and contributor deadlines to maintain consistent publication cycles
- Revamped the newsletter's content strategy and design layout, resulting in a 50% increase in student readership and engagement

PROJECTS

ROS Mobile Robot
- Integrated LiDAR sensor and published data to implement real-time obstacle detection and avoidance for dynamic environments, and is capable of autonomously tracking a blue line using computer vision and ROS using Python and C++
- Conducted extensive field testing to validate mapping accuracy, path tracking stability, and obstacle response

Vending Machine Simulator
- Designed a vending machine simulation in C++ with mode locking and password authorization; service and customer mode
- Programmed inventory management of drinks and transaction logic to handle customer payments and calculate change

AI Study Planner
- Developed a web application that generates personalized study schedules for college students using AI-driven task prioritization
- Designed and built RESTful APIs in Spring Boot to handle task creation, prioritization, and calendar scheduling logic
- Built an interactive React.js frontend with dynamic task management and calendar visualization for planned study sessions

Personal Portfolio Website
- Developed a portfolio website to showcase projects, work experience, and skills using HTML, CSS, SCSS, and JavaScript
- Hosts and version-controls the site through GitHub, implementing a responsive design for an optimized user experience
- Registered a custom domain and configured DNS to redirect traffic from GitHub Pages to the URL

TECHNICAL SKILLS

Programming Languages: Terraform, Ansible, Python, PowerShell, Java, JavaScript, C++, C, SQL, R, CSS, HTML

Developer Tools: Terraform Cloud, Red Hat Ansible, Microsoft Azure, Microsoft Office, VS Code, Visual Studio, GitHub, Git, RStudio, WSL, Linux, ROS, MySQL, Power BI, React.js, Spring Boot, PostgreSQL