DANIEL VU

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Education

University of Minnesota Twin-Cities, GPA - 3.58　　　　　　　　　　　**Sep. 2023 – May 2026**
Bachelor of Science in Computer Science — Minor in Management Information Systems　　*Minneapolis, MN*

Relevant Coursework

- Algorithms and Data Structures
- Software Engineering
- Advanced Programming Principles
- Machine Architecture
- Machine Learning
- Program Design and Development
- Computing and Programming Concepts

Technical Skills

Languages: C++, SQL, MongoDB, Python, Java, JavaScript, TypeScript, GLSL, C
Developer Tools: Git, Docker, Jira, VS Code, Raspberry Pi OS
Technologies/Frameworks: Angular, React.js, Node.js, Express.js, Firebase Auth, Stripe, Tailwind CSS
Cloud & DevOps: AWS (S3, EC2, CloudFront, SES), Firebase Cloud Messaging
AI & Computer Vision: OpenCV, TensorFlow, Facial Recognition, Machine Learning
Software Engineering Concepts: Object-Oriented Design, SOLID Design Principles, Algorithms and Data Structures, Prioritization Methods (MoSCoW), EARS Requirement Style, Gherkin Tests, RESTful API Development, IoT Integration

Certifications

TestOut PC Pro Certification (6-1C6-NH5VR): Tested through simulations and exams for installing, repairing, configuring, and securing computer hardware/software and operating systems in home/corporate environments.

Soft Skills

Communication, Critical Thinking, Attention to Detail, Project Management, Adaptability, Problem Solving, Collaboration

Projects

Tenant Management Website | *Angular, Express.js, MongoDB, Firebase Auth, Stripe, AWS*　　**GitHub Repository**
- Built a full-stack rental management system with tenant onboarding, rent collection, and maintenance features.
- Integrated Stripe for payments, Firebase Auth for role-based access, and AWS for hosting and document storage.
- Deployed Angular frontend via AWS S3/CloudFront; used Firebase Messaging and AWS SES for real-time alerts.

Drone Delivery Simulation | *C++, TypeScript, Jira, Docker*　　**Docker Repository**
- Built a 3D drone delivery simulation using C++ for backend and TypeScript for interactive frontend.
- Added features like recharge stations, battery management, and live telemetry tracking.
- Used design patterns (factory, decorator) and Jira-based Agile workflows for scalable development.

Smart Mirror System | *Raspberry Pi, Python, OpenCV, TensorFlow, MQTT*　　**GitHub Repository**
- Created an AI-powered smart mirror with real-time updates, personalization, and modular components.
- Enabled facial recognition via TensorFlow and hands-free interaction using voice and gestures.
- Integrated weather, news, and IoT controls into a responsive, Raspberry Pi-based UI.

Experience

Tech Academy　　　　　　　　　　　　　　　　　　　　　　　　**Apr 2024 – Present**
STEM Education Intern　　　　　　　　　　　　　　　　　　　　　　　*Little Canada, MN*
- Prepared computer science course materials, guiding students in robotics and virtual reality coding projects.
- Guided students through robot assembly and troubleshooting, boosting their robotics comprehension by 70%.
- Led workshops that introduced 100+ students to virtual reality development, resulting in a 90% project completion rate.