

Norman Manigault

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EDUCATION

Arizona State University

Expected May 2028

BS in Computer Science

GPA: 3.73

Relevant Coursework: Data Structures and Algorithms, Operating Systems, Intro to Software Engineering

TECHNICAL SKILLS

Languages: Python, Typescript, Javascript, Java, C++, SQL

Libraries and Frameworks: Node.js, React, React Native, Next.js, FastAPI, Electron, Express, OpenCV, Pandas

Developer Tools: Git, AWS, tRPC, Vite, Figma, Kubernetes, PostgreSQL, Docker

WORK EXPERIENCE

The Luminosity Lab

Tempe, AZ

Student Researcher

Aug 2026 – Present

- Architected a pipeline that converts drag-and-drop programs into compact commands for wired and Bluetooth execution on Raspberry Pi Pico W robots, making robotics programming more accessible to students.
- Support backend services for authentication, classroom management, student progress tracking, and payments, integrating cloud-based infrastructure with Amazon Bedrock.

Raytheon

Tucson, AZ

Software Engineer Intern

Jun 2026 – Aug 2026

- Automated the import of test limits and measured values into Excel using Python, reducing manual data entry and cutting report time from 2 hours to 10 minutes – a **90%** reduction in manual effort
- Improved reliability across hardware test stations by validating multiple electronic components and enhancing test processes in C++ alongside cross-functional engineering teams.

Cita Marketplace

Remote

Software Engineer Intern

Jun 2025 – Aug 2025

- Built a reservation submission workflow with input validation and database integration using Next.js, tRPC, and SQL; optimized front-end purchasing flows to reduce checkout time by 15%.

PROJECTS

[ASU ProfessorView](#) (Typescript, JavaScript, Vite, Node.js)

- Built and launched a Chrome extension that embeds RateMyProfessor ratings directly into ASU Class Search, reducing professor lookup time by **80%** and reaching **1,900+** active users.
- Developed a responsive data pipeline with concurrent API requests, TTL caching, multi-campus professor matching; expanded support to Chrome and Firefox using JavaScript, Typescript, and Vite.
- Tested safe rendering of untrusted API data and added smoke tests for Chrome and Firefox content bundles; gated release packaging on type checks, tests, builds, and extension validation.

Quiver (Python, FastAPI, Electron, JavaScript, SQLite, SVN)

- Built a cross-platform engineering data and project-management application with 54 REST endpoints supporting CAD vault synchronization, task dependencies, and Gantt planning.
- Built a SolidWorks metadata pipeline to extract custom properties and where-used data; secured multi-user workflows with bcrypt, JWT authentication, rotating refresh tokens, and 3-level role-based access control.

LEADERSHIP AND PROFESSIONAL DEVELOPMENT

Management Leadership for Tomorrow

Washington, DC

Career Preparation Fellow

Dec 2025 – Present

- Accepted into a selective 18-month professional development program that accelerates the career growth of emerging leaders through structured coaching, mentorship, and targeted skill-building.
- Engage with leading partner organizations (e.g., LinkedIn, Bloomberg, and Deloitte) to gain industry exposure and insight into tech-talent pathways.

It Starts With Us

Washington, D.C

Co-Founder and Technical Director

Aug 2025 – Present

- Co-founded a volunteer organization that established **2 community partnerships** and delivered tutoring and mentorship programs serving **100+ students**.
- Assisted the construction of **50+ volunteers** supporting two long-term partnerships, delivering over **200 hours** of service to local youth programs