Alexander Bui

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EDUCATION

Texas A&M University   College Station, TX
Bachelor's of Science, Computer Engineering, GPA: 4.0   *May 2027*
- Craig and Galen Brown Engineering Honors, Dean's Honor Roll
- Relevant Coursework: Data Structures and Algorithms, Computer Architecture, Intro to Computer Systems, Program Design and Concepts, Intro to Digital System Design, Electrical Circuit Theory, Linear Algebra

WORK EXPERIENCE

AI/ML Software Engineer   Jun 2025 — Present
Texas Cyber Range
- Orchestrated agentic AI workflows with LangGraph to automate customer support, integrating RAG pipelines and Qdrant vector stores for real-time context retrieval, reducing average ticket resolution time by 500%.
- Designed a containerized microservices architecture deployed on OpenShift (Kubernetes), utilizing Docker and CI/CD pipelines for automated container builds and scaling.
- Built a custom React dashboard for human-in-the-loop agent oversight, enabling support staff to review and edit AI drafts.

Student Technician   Aug 2025 — Present
Texas A&M University
- Triaged cybersecurity incidents across a large-scale academic network, utilizing Elastic to correlate network logs and identify Indicators of Compromise (IOCs).
- Leveraged Oort for identity-based threats, specifically mitigating account takeovers and MFA bypass attempts.
- Reduced alert fatigue by filtering false positives and documenting remediation procedures for common threat vectors.

Undergraduate Teaching Assistant   Aug 2025 — Dec 2025
Texas A&M University
- Enhanced student learning for a class of 30 students by clarifying topics from coding lectures and conducting weekly office hours to assist students one-on-one with debugging Python lab assignments and understanding software concepts.

Software Engineer Intern   Jan 2025 — Aug 2025
GravityIntel
- Engineered a full-stack web application leveraging agentic AI to automate the analysis, management, and evaluation of government contract bids.
- Architected a hybrid data solution using PostgreSQL for relational data and Couchbase for NoSQL and high-performance vector search to manage complex bid information.

PROJECTS

Aggie Events | *React, NextJS, ExpressJS, PostgreSQL, Docker*   Sep 2024 — Present
- Built a REST API backend with Node.js, Express.js and PostgreSQL capable of handling complex search queries.
- Engineered robust authentication and session management systems with OAuth 2.0 to safeguard user interactions.
- Enhanced website deployment speeds by 250% through a custom CI/CD pipeline using Docker and Bash.
- Streamlined tasks for a 27-member team using Agile methodologies, earning **Best Project Manager** for Fall 2024.

OpenGL Graphics Engine | *C++, OpenGL, CMake*   Apr 2023 — Present
- Built a graphics pipeline from scratch using OpenGL and C++, implementing rendering with an Entity-Component-System (ECS) architecture, supporting lighting, textures, and custom model loading.

SKILLS

- **Technologies**: C/C++, JavaScript, Python, SQL, Java, TypeScript, HTML/CSS, React, NextJS, Node.js, ExpressJS, PostgreSQL, Docker, CUDA, Git, Linux, OpenGL, Bash
- **Awards**: 1st TAMUHack 2025 (Toyota), 2nd TAMU Datathon 2025 (Hitachi), 2nd TAMUHack 2025 (AA), 3rd Datathon 2024 (TAMIDS), Cyberpatriot National Platinum Semifinalist