Guan Lin

Iowa City, IA | P: +1 5153506235 | 19linguan@gmail.com

EDUCATION

Iowa State University — Ames, IA
Bachelor of Engineering | Major in Computer Engineering — May 2023
Cumulative GPA: 3.3/4.0; Dean's List 2022-2023

WORK EXPERIENCE

BAE Systems — Cedar Rapids, IA
Software Engineer — Jun 2023 – June 2025
- Architected and developed Modernized GPS receiver software with an 11 person team using Feature Driven Development methodology
- Implemented automated testing framework and conducted rigorous simulations on test benches, identifying and resolving 50+ critical bugs pre-release
- Delivered 100% of software/hardware releases meeting technical requirements within project deadlines
- Collaborate cross-functionally with development, QA, systems, and product teams to quickly address and remediate high priority issues
- Coordinated coding efforts using C/C++, Python, and MATLAB, improving performance metrics by 15%

BAE Systems — Cedar Rapids, IA
Software Engineering Co-op — Jun 2022 – May 2023
- Designed automated test scripts in Python for Modernized GPS receiver software in an Agile team environment
- Develop Modernized GPS receiver source code with a team of eight in an agile environment
- Composed technical documentation for software defects, requirements, features, and automated testing
- Mentored new members of the automated testing team by providing knowledge and advice on design techniques and coding standards

PROJECTS

Interactive Learning Web Application — May 2023
- Developed full stack interactive learning web application for large scale classrooms during lectures and outside of class with the use of React.js on the frontend and Node.js on the backend with a team of six
- Applied knowledge of backend to develop database schema, and SQL development using VM servers to store data
- Developed Express application to help backend development such as creating API's, server side development, etc.
- Built RESTful APIs and coordinated frontend/backend integration through comprehensive documentation and active planning/communication

Todo List Application — June 2025
- Developed responsive todo list application using vanilla JavaScript, HTML, and CSS with user authentication, list management, filtering, task capabilities, and mobile responsive design with component architecture
- Designed intuitive UI/UX with light/dark theme toggle and deployed to Netlify with CI/CD pipeline and documentation

Mars Rover Navigation System — May 2022
- Led 4-person team developing autonomous navigation software for obstacle avoidance using embedded C programming
- Modified ARM microcontroller interface and dual sensors, infrared and ping, to automate Roomba navigation

Portfolio Website — June 2025
- Built responsive personal portfolio using modern web technologies showcasing technical projects with demos

Technical Skills

Languages: Python, C/C++, MATLAB, Java, JavaScript, SQL
Frameworks/Libraries: React.js, Node.js, Express.js
Tools & Technologies: Git, SVN, Jira, Docker, Linux, Embedded Systems, Test Automation, SQL Servers