Corbin Lienau

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EDUCATION

Bachelor of Science Software Engineering May 2026
Arizona State University, Tempe, AZ 3.6 GPA

TECHNICAL SKILLS

Programming Languages: Java, Python, C/C++, Assembly, Javascript, MySQL
Tools: Docker, GIT, MATLAB, AutoCAD

EXPERIENCE

Digital Circuit Design Lab October 2023 – December 2023

- Configuring breadboards, flashed **FPGAs**, and coded in **VHDL**.
- Implementing digital circuits using **RTL** (Register Transfer Level) design techniques.

Computer Systems Foundations August 2023 – October 2023

- Familiarized with Process Execution, Threading, and Parallelism.
- Demonstrated knowledge of **MySQL**, Access, Excel, and other databases.

Java Data Structures & Algorithms January 2023 – May 2023

- Created fundamental algorithms comprising Software Engineering.
- Showcased understanding of **OOP** (object-oriented programming) fundamentals.

PROJECTS

Weather Web App August 2023 – September 2023

- Developed a real-time weather web application utilizing **React.js** and **Node.js**, resulting in an efficient environment and reduced development time by 30%.
- Implemented user authentication and registration via Firebase, enhancing data security and offering a personalized user experience.
- Integrated OpenWeatherApp **API** for accurate real-time weather data, providing users with 97% accuracy rate in weather forecasts.
- Employed responsive design techniques with HTML and CSS, ensuring a seamless user experience across diverse devices and screen sizes, enhancing rendering time by 5 seconds.

Coordinated Robot Simulation and Control January 2023 – March 2023

- Designed a drone robot using **TinkerCAD**, incorporating both hardware and software components to create a functional robotic system with 95% accuracy avoiding simulated objects.
- Developed control logic and functionality for drone using **Arduino**, writing efficient and reliable code leveraging OOP practices to ensure robot's proper operation.
- Utilized **MATLAB** to build a rudimentary simulation environment visualizing coordinated movement and actions of multiple robots on a grid.
- Spearheaded project's success in 7 ½ weeks through active collaboration, clear communication, and a commitment to meeting project milestones and goals.

Coffee Machine Water Reservoir Redesign June 2021 – February 2022

- Designed and fabricated a custom PCB for a water reservoir conversion project leveraging 2D **AutoCAD**, incorporating a 4N25 opto-isolator and an LS555 timer chip.
- Employed AutoCAD to devise precise designs for water reservoir and mechanical components, adapting it into a coffee machine reservoir with integrated IR sensor water level detection.
- Conducted testing and diagnostic procedures, converting a standard reservoir into a water reservoir with a precision-timed water pump, reducing fill time to 7 seconds for coffee machine integration.