Alexander E. Sava

(480) 825-8803 ● asavaus@gmail.com ● LinkedIn ● Github ● Portfolio

EDUCATION

University of Arizona, AZ

- B.S.E., Computer Science, Cum Laude 2018-2022
- Academic Distinction 2018-2022
- Dean's List 2018-2022

ACADEMIC/PERSONAL PROJECTS

Database Design and Implementation for Health Care Department

- Built a database-driven information management system from the ground up for a theoretical Campus Health Department
- Two-tier-client-server architecture using Oracle DBMS as the Back-End and JDBC as the Front-End to run a text-based program
- The Oracle Database was implemented from a normalized relation schema and was queried through the JDBC Front-End to handle CRUD operations for patients and appointments

MiniJava Compiler

- Compiles valid MiniJava code into executable Assembly programs
- Multi-program project built around the six-step compilation process: Lexical Analysis, Syntax Analysis, Semantic Analysis, IR Generation, Code Optimization, and Target Code Generation
- Utilizes the JFlex program and Java Cup packages to parse and convert the given MiniJava code into tokens and then an Abstract Syntax Tree used in the final steps of compilation

Web Development

- Developed front-end, back-end, and full-stack web applications for static and dynamic websites such as my portfolio, a quiz application, a book list application, and more
- These web applications were built using a multitude of languages such as CSS, HTML, JS, PHP, Python, and more recently, React, Redux, and Express.js
- Hosted on Netlify and AWS for public access, these applications used MySQL and MongoDB databases to store persistent data

WORK EXPERIENCE

Zinc Bistro, Busser, Scottsdale, Arizona 2021-2022

- Worked in a fast-paced team environment to assist and cater to guests, keep amenities stocked, and ensure cleanliness throughout the restaurant

TECHNICAL SKILLS

- C
- Python
- Java
- JavaScript
- HTML
- CSS
- React.js
- Redux.js
- Node.js
- Express.js
- MySQL
- MongoDB
- Mongoose
- Git
- Microsoft Office

ACTIVITIES

Arizona State University RoboHackathon: 2019

- Built and implemented a machine learning robot with AWS to navigate a course and identify school mascots.

Controller modifications 2022

- Replaced Xbox controller components with custom encoder to bypass wireless Xbox connection and allow connection to PC through USB.