OMAR ZEINEDDINE

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EDUCATION

University of Virginia, Charlottesville, VA
Bachelors in computer science | Minor in Data Science   *August 2021 - May 2025*
- GPA: 3.88
- University of Virginia Dean's List
- Relevant Coursework: Data Structures and Algorithms 1 & 2, Computer Systems and Organizations 1 & 2, Advanced Software Development, Software Development Essentials, Discrete Mathematics, Data Science Systems, Communicating with Data

EXPERIENCE

Sitscape Inc, Remote
Software Engineer Intern   *June 2023 - August 2023*
- Developed backend and frontend functionality for keyword and semantic search on a document database using an Opensearch cluster, RESTFUL API, JavaScript/jQuery, HTML/CSS and PHP
- Improved keyword search speed by more than 50% compared to simple database querying
- Prototyped a document question and answering chatbot program using Langchain, FAISS, and the Falcon7B LLM using Python

University of Virginia Department of Computer Science, Charlottesville, VA
Teaching Assistant   *January 2023 - Present*
- Provide support for CS 3140 (Software Development Essentials) and CS 2130 (Computer Systems and Organizations)
- Support 500+ students overall through weekly office hours
- Perform code-reviews and provide feedback for programming assignments in Java, x86-64 assembly and C

PROJECTS

Course Review Application | Java, Gradle, Git, JavaFX   *April 2023 - May 2023*
- Collaborated within a team to develop a comprehensive Course Review Application using Java and JavaFX, enabling users to submit detailed course reviews and search for existing reviews with ease
- Implemented a SQLite database to efficiently store the submitted course reviews, ensuring seamless retrieval for users
- Utilized the model/view/controller (MVC) architectural pattern to create a modularized and highly organized program structure, enhancing code maintainability and scalability while ensuring a user-friendly experience for both reviewers and searchers

Wordle GUI | Java, JavaFX, Gradle, Git, Junit   *March 2023 - April 2023*
- Designed and implemented a Wordle project with a user-friendly graphical interface using JavaFX, allowing users to generate random words and play Wordle with a near-identical experience to the website version
- Ensured the reliability and functionality of the program by incorporating rigorous unit testing, guaranteeing a seamless and error-free experience
- Employed JavaFX to implement the model/view/controller architecture, effectively building the graphical user interface (GUI) and enhancing the overall experience of the Wordle game

Instruction Set Architecture - Simulation | Python   *October 2023 - October 2023*
- Created a comprehensive low-level instruction set architecture (ISA) simulation, effectively decoding hexadecimal instructions for accurate execution
- Programmed the stack, memory, and registers, to facilitate basic operations within the ISA simulation

TECHNICAL SKILLS

- Languages: Java, Python, HTML/CSS, Javascript, PHP, SQL, C, R, x86-64 Assembly
- Tools/Frameworks: jQuery, Git, Gradle, JUnit, Mockito, JavaFX, Docker, Langchain, Visual Studio Code, PyCharm, IntelliJ

ACTIVITIES

Lebanese Club, Charlottesville, VA
President   *August 2023 - Present*
- Effectively lead and manage all aspects of the Lebanese Club, including event planning, budgeting, and team coordination, resulting in increased club engagement and recognition on campus
- Promote an inclusive environment within the club, welcoming 100+ individuals from diverse backgrounds and encouraging cultural exchange and understanding
- Demonstrate exceptional financial management skills by securing club funding and optimizing budget utilization, ensuring the club's sustainability and growth