Kazmain Shah

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EDUCATION

University of Illinois Urbana-Champaign   Champaign, IL
Bachelor of Science in Computer Science + Economics   *Expected May 2025*
- GPA: 3.77; Junior
- Activities and societies: Association for Computing Machinery (ACM), Pakistani Student Association (PSA)
- Achievements: Dean's List Fall 2022

EXPERIENCE

Software Developer   June 2023 – August 2023
Medline Industries   *Northfield, Illinois*
- Developed a dynamic web portal using Java and JSP, and provided comprehensive documentation for the codebase to ensure ease of maintenance within the development team.
- Implemented a Messaging Tool using SOAP and HTTP enabling seamless XML message exchange and automated request URL generation based on user preferences.
- Applied advanced XML parsing and manipulation techniques to extract, modify, and format data fields within SOAP messages, significantly improving error analysis and resolution efficiency.
- Designed and implemented a robust backend connection to a SQL database in collaboration with cross-functional teams. This enhancement enabled streamlined data retrieval and manipulation for all page contents.

Website Development Team Lead   March 2023 – Current
Career Advancement Exchange   *Champaign, Illinois*
- Led and managed a high-performing team in the development and creation of websites in React for diverse clientele.
- Oversaw the entire website development process, from initial concept to final implementation, ensuring adherence to project timelines and deliverables.
- Collaborated closely with clients to understand their unique requirements, translating them into effective website designs and functionalities.

Website Developer   August 2023 – December 2023
Atlas   *Champaign, Illinois*
- Collaborated closely with ATLAS faculty web developers who required website creation or redesign
- Led the team in developing best practices, establishing proper organization and documentation standards, and building templates in WordPress, streamlining the website development process and ensuring consistency across projects. Additionally, created training materials for future interns, enabling efficient knowledge transfer and supporting the growth of the team.

PROJECTS

OpenFlights Data Analysis Project *C++*
- Leveraged the OpenFlights Data set, encompassing tens of thousands of airports and routes, to conduct comprehensive data analysis and derive actionable insights. Employed C++ to efficiently process and analyze the data, resulting in valuable outcomes.
- Utilized CMake software for precise testing and compilation of C++ code, ensuring accuracy, functionality, and optimal performance throughout the development cycle.
- Implemented advanced algorithms like Breadth First Search, PageRank, and Dijkstra's algorithm in C++ to extract crucial information from the dataset. This included metrics such as connected components, vital airports, and shortest paths, thereby enhancing data-driven decision-making capabilities.

Mosaic Generator *Python*
- Utilized the Python Flask framework to develop a mosaic generator, contributing to a large-scale system as part of a collaborative project
- Designed and implemented 13 microservice mosaic generators, each incorporating at least 60 unique tile images for creating mosaics.
- Created a single mosaic reducer responsible for selecting the best possible tiles from two mosaics, resulting in the generation of a single mosaic from over 2000 individual mosaics.

SKILLS

- Spoken Languages - English, Sindhi, Spanish
- Programming Languages - C++, Java, React, Latex, Python, R, JavaScript, HTML, CSS