David Sawires

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EDUCATION

Bachelor of Arts in Computer Science and Mathematics

May 2024

St. Olaf College

Northfield, MN

Cumulative GPA: 3.88/4.00, magna cum laude

- Activities: IIME Honor Society, Operating Systems Teaching Assistant, Software Design Teaching Assistant
- Awards: Davis United World College Scholar, St. Olaf Entrepreneurial Scholar, Dean's List
- Relevant Coursework: Algorithms, Computational Imaging, Data Structures, Foundations of AI, Operating Systems, Computational Geometry, Computational Mathematics, Graph Theory, Probability Theory

EXPERIENCE

Backend Software Engineer

October 2023 – Present

Infracraft (Django, Flask, FastAPI, Python)

San Francisco, CA (Remote)

- Developed Django data models and RESTful API endpoints for CRUD operations with sub 200ms response times.
- Created a Slack chatbot that triggers automated environment deployments and GitHub release processes.
- Implemented a FastAPI application for API interactions with GitHub, enabling file management, content updates, and automated release branch creation.
- Partnered on strategic direction and development approach.

Software Engineer Intern

June 2023 – August 2023

San Francisco, CA

Bankbarn (Django, Python, pytest)

- Wrote and integrated pytest on-delete tests for Django models into CircleCI, increasing test coverage by 15%.
- Engineered a distributed logging and visualization solution via custom dashboards on Amazon CloudWatch.

Lead System Administrator

September 2021 – December 2022

St. Olaf College (bash, Linux, VMWare)

Northfield, MN

- Lead infrastructure development, maintenance and user support for the College's CS department.
- Engineered remote access solution for ARM users facilitating support for x86-based workflows.

PROJECTS

Wearer Swift, SwiftUI

- Created an iOS Application that utilized Core Location library to suggest clothing based on local weather.
- Designed a UI that displays weather conditions and clothing suggestions using OpenWeatherAPI data.

Vectorizer Python, SciPy, Numpy

- Developed an image vectorization program in Python to transform images into triangulated representations.
- Implemented a threshold-based edge detection algorithm, optimizing for detail clarity through visual comparison.

Ethics of Chatbots JavaScript, HTML, CSS

- Developed an interactive website on chatbot ethics using HTML, CSS, and JavaScript, ensuring a seamless user experience.
- Implemented a chat interface that interacts with the OpenAI API, designing the frontend and using a secure proxy server to handle API calls for sending and receiving messages.

Chat App C++, React, Python

- Designed and implemented a user-friendly interface for a cross-platform chatting app using React.
- Managed data interchange between frontend and backend of the chat application through a Python server.

SKILLS

Programming Languages: Python, C, C++, R, JavaScript, HTML, CSS, bash, Mathematica, SQL, Swift

Developer Tools: Git, Docker, VS Code, Linux/Unix

Libraries and Frameworks: Django, FastAPI, Flask, Pandas, NumPy, Matplotlib, SciPy, pytest