Dax Taraleskof

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I'm Dax, a new graduate and prospective entry level software engineer with hands-on experience in full-stack development, game development, and API integration. During my university studies I was a tutor for Computer Science. This means that I'm passionate about mentorship, leadership, and helping others grow their technical skills. My goal is to leverage my skills in a dynamic team environment in order to deliver high-quality software. I have a BSc in Computer Science from CSU San Marcos.

Technical Proficiencies

Programming Languages: Python, C++, C, JavaScript, TypeScript, Go, Rust, SQL
Frameworks & Libraries: React, React Native, Svelte, Flask, FastAPI, numpy, Django
Tools & Technologies: REST APIs, Sendgrid, Nix, PostgreSQL, MongoDB
Platforms: Linux, NixOS, Windows, macOS
Cloud Platforms: Amazon Web Services (AWS), Google Cloud Platform (GCP)
Source Control: Git, Jujutsu

Career Engineering Projects

Animal Adoption App - *Capstone Project, CSUSM (2024)*
- Developed a React Native app with Expo to match users with adoptable pets based on user preferences.
- Integrated external APIs (SendGrid, Rescue Groups) for email notifications and real-time pet listings.
- Deployed onto AWS and integrated with AWS services like Aurora and S3.
- Designed a gamified matching algorithm that increased user engagement by 50%.

AI Fraud Detection - *Artificial Intelligence Course Project, CSUSM (2024)*
- Imported a dataset from Kaggle to train a model on fraudulent bank account charges.
- Used numpy to load the dataset and scikit-learn to train the model.
- Utilized various algorithms like decision tree and random forest to determine the best model.

Boids in JavaScript - *Game Development Course Project, CSUSM (2024)*
- Implemented the artificial life program that simulates flocking behavior in JavaScript using p5js.
- Contains dynamically configurable options during runtime, like alignment, cohesion, and separation which are demonstrated using both 2D and 3D sprites.

Unity Virtual Reality Game - *Virtual Reality Course Project, CSUSM (2023)*
- Built an immersive VR survival game using Unity, C#, and Oculus hardware.
- Implemented combat mechanics and waves of AI-controlled monsters.
- Collaborated with team members using GitHub and JIRA for agile development.

Brain Wave Attention Scanner - *Software Engineering Project, CSUSM (2023)*
- Developed with a BrainBit headband using their Python SDK to detect user brain wave activity.
- Analyzed attention data to determine focus during tasks.
- Designed algorithms to identify and optimize peak learning times.

Education

California State University San Marcos (CSUSM), Jan 2023 - Dec 2024
GPA: 4.0 (Major), 3.89 (Overall) - *BSc in Computer Science*

- Relevant coursework: Software Engineering, Software Testing, Software Development Life Cycle (SDLC), Database Management, Cloud Computing, Artificial Intelligence, Operating Systems

MiraCosta Community College, Jan 2019 - Dec 2022
GPA: 3.83 GPA (Transfer)

- Relevant coursework: Java, C++, Python, Data Structures & Algorithms, Assembly, Discrete Structures, Application Design, Debugging Software

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Career Experience

Computer Science BSc Capstone Project, *California State University, San Marcos (2024)*

- Adhered to the AGILE methodology in order to organize weekly sprints and semi-weekly standups for our project.
- Used JIRA and Trello to coordinate between project members and to create user stories to implement features for our project.
- Coordinated with an external business sponsor in order to develop an application to a specific set of standards as set forth by the sponsor.
- Utilized open-source frameworks such as Flask, React, and React-Native to develop a website and mobile application to showcase to faculty and potential users.

Computer Science Tutor, *MiraCosta College* (2021-)

- Tutored over 100 students in C++, Java, and Python with the intent of enhancing their understanding of data structures, algorithms, and software design.
- Led collaborative study sessions to reinforce course concepts and improve academic performance.
- Assisted students in testing, implementing, and debugging coding projects.
- Developed custom learning plans to support diverse learning styles and paces.
- Helped students as an in-class tutor for a data science course, which focused on utilizing numpy and statistics to understand and represent data.

Personal Projects

I maintain a showcase website and personal blog at daxmictar.net.

I have several personal projects and some work from my university studies on my GitHub. Many of which are related to or have helped me learn about various topics, such as data structures, algorithms, low-level software engineering, game development, program design, and abstraction. After graduating in Fall of 2024, I devoted a lot of my personal time to learning about graphics programming. I've since learned about shaders, shader languages, immediate-mode UIs, and linear algebra.