Matthew Thompson Soto

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EDUCATION

University of Wisconsin-Madison

Madison, WI

B.S. in Computer Science | GPA: 3.55/4.0

September 2019 - May 2023

Relevant Coursework: Data Structures & Algorithms, Artificial Intelligence & Machine Learning, Machine Organization, Linear Algebra, Discrete Math, Calculus II, Statistics, Data Science

EXPERIENCE

Software Development Engineer Intern

May 2022 – August 2022

Madison, WI

Amazon - Shopbop iOS Team

• Developed the "My Reviews" functionality for Shopbop's website and app using React Native and TypeScript

- Practiced CI/CD through writing, reviewing, testing and deploying code
- Worked alongside the framework team to migrate code to React Native
- Wrote unit tests using React Testing Library and Jest and documented relevant intern project details
- Served as a resource for React Native questions, as the organization transitioned into using the framework

Undergraduate Teaching Assistant

September 2020 – June 2021

University of Wisconsin-Madison

Madison, WI

- Helped hundreds of students in the "CS 200: Programming I" course efficiently learn the fundamentals of programming using Java
- Led weekly lab sessions with 10-15 students and actively facilitated their understanding of new concepts through engaging activities, coding examples, and group exercises
- Held office hours to address students' questions and concerns, effectively sharpening their problem solving skills

Software Developer

April 2020 - June 2020

Flashher (iOS Social Media App)

Dorado, PR

- Assisted an acquaintance to start developing *Flashher*, an iOS social media app that allows users to share bouncing pictures or "boomerangs", comments, and likes with followers
- Developed an algorithm to pause pictures out of user's sight, greatly improving speed and memory usage
- Implemented the username & password system within the application using Firebase
- Gained experience with the Swift programming language, XCode, and database management
- Received and implemented feedback from the App Store and the many users who sought ways to improve the application

Projects

Scenes - a Deep Machine Learning Model

April 2022

- Created a model capable of accurately detecting scenes within an image, built using a convolutional neural network based on the Le-Net 5 architecture
- Utilized PyTorch, MiniPlaces dataset, computer vision, and fundamental AI/ML concepts to construct the model
- Optimized variables such as learning rate, number of epochs, and batch size to avoid model overfitting

Snake Game June 2020

- Utilized PyGame and OOP fundamentals to create my version of the classic game Snake
- Implemented a main menu GUI with Easy, Normal, and Hard difficulties that change the speed of game
- Tracked existing high scores using file I/O and implemented audio via sound effects
- Learned to package and deploy applications into executable file using PyInstaller

TECHNICAL SKILLS

Languages: TypeScript, Python, Java, C/C++, HTML, CSS, Swift, SQL Technologies: XCode, Git, Linux, AWS, GCP, Firebase, MySQL, VS Code

Libraries: ReactJS, React Testing Library, NumPy, Pandas, Matplotlib, PyTorch, TensorFlow, SciPy, OpenCV

Frameworks: React Native, Jest, Enzyme, Flask, Django, Apache, JUnit