Kevin Ma

Education

Purdue University August 2021 - May 2025

B.S Computer Science with concentration in Machine Intelligence

West Lafayette, Indiana

Relevant Coursework

Algorithm Analysis, Computer Systems and Architecture, Data Structures, Databases and Information Systems, Discrete Math, Linear Algebra, Multivariable Calculus, Statistics and Probability

Projects

Deep Learning Profanity Filter | Python, Pytorch

August 2023 - Current

- Developed a deep learning neural network for profanity detection using natural language processing (NLP) methods.
- Employed word embedding and advanced neural network architectures to effectively identify and differentiate profanity within textual data.

Spaceship Arcade Game | *Python*

May 2023 – August 2023

- Developed a Python game using the Pygame library, featuring 1980's pixel art and sound effects, providing an immersive gaming experience reminiscent of old-school arcade games.
- Implemented player controls, enemy AI, and collision detection mechanics, enhancing gameplay dynamics and user engagement.

Linux Shell | *C*, *C*++

January 2023 – May 2023

- Developed a Linux shell using Lex & Yacc, C, and C++, incorporating features like pipes and subshells.
- Implemented robust command parsing and execution mechanisms, ensuring efficient and reliable command line interaction.

Portfolio Website | *HTML*, *CSS*, *JavaScript*

August 2022 – December 2022

- Designed and developed a dynamic personal portfolio website using HTML, CSS, and JavaScript
- Implemented responsive web design techniques and optimized the website for performance, accessibility, and cross-browser compatibility, resulting in an engaging user experience and increased online visibility.

Online Discussion Forum | Java

May 2022 – August 2022

- Led a team in developing an advanced Java-based online forum.
- Implemented custom Purdue-Themed GUI and networking functions, enhancing user communication.
- Designed and deployed a secure client-server architecture with robust security measures, ensuring reliability and seamless user experience.

Air Quality Sensor | C++, Arduino

January 2022 – May 2022

- Developed and integrated an air quality sensor, ensuring cost-effectiveness and robust performance.
- Leveraged C++ and Arduino to implement a range of features, including failsafe reboots, real-time data collection, and data analysis algorithms, contributing to accurate and actionable air quality monitoring.

Technical Skills

Arduino, Bash, C, C++, CSS, HTML, Java, JavaScript, Mongodb, Neo4j, Python, SQL, Tableau

Experience

Chipotle

June 2021 - August 2021

Crew Member Fremont, California

- Optimized inventory management, improving stock control and service efficiency.
- Ensured a clean and safe environment, enhancing customer experiences.