Aidan Mahoney

EDUCATION

University of Wisconsin-Madison

Bachelor of Science in Computer Science

Expected Graduation: May 2027

Madison. WI

- Relevant Coursework: Programming II (Java), Programming III (Java), Linear Algebra, Discrete Math
- Organizations: Wisconsin Neuromorphic Computing, Wisconsin Robotics, Undergraduate Projects Lab, Center for Educational Opportunity, Gener8tor CS NEST

EXPERIENCE

DeveloperDB Jul 2024 – Sep 2024

Data Engineer Intern

Sunnyvale, CA

- ullet Enhanced matchmaking by processing 1M+ profiles, extracting critical data for improved decision-making
- Improved data consistency by 25% by resolving errors in merged profiles through custom validation scripts
- Accelerated data processing by 83%, reducing time from 3 hrs to 30 min, by developing efficient Python scripts with minimized external library dependencies

Starbullet Studios Mar 2021 – Jul 2024

Maintainer

Marlboro. NJ

- Led a 5-person team in developing an MMORPG, achieving 7.5K+ plays and 70+ stars during its alpha release
- \bullet Decreased ping by 80% through optimized client-server communication protocols, improving gameplay
- \bullet Contributed 50K+ lines of code to an established codebase, integrating a Lua-based database for player stats, which enabled advanced game analytics

PROJECTS

Borzo | Python, React. js, Tailwind CSS, AWS, SOLIDWORKS

Nov 2024 – Current

- Co-developed an Airfoil design tool currently undergoing review by engineers from several Aerospace companies
- Reduced design time by 500% with a Python feature for direct CAD file downloads, enabling faster integration
- Increased engineering club engagement by 120% by hosting a tool locally with SSL certification and port forwarding, using an AWS EC2 instance as a proxy for secure access

Market Prediction Dashboard | Python, Scikit-learn, Streamlit, NumPy, Pandas

Sep 2024 – Nov 2024

- Built an interactive stock market prediction tool using Python, with data sourced from Yahoo Finance
- Achieved strong prediction accuracy, with a Mean Squared Error (MSE) of 38 compared to values in the hundreds
- \bullet Enhanced user engagement by 15% by creating an interactive dashboard, allowing users to input and visualize stock predictions

Pokémon Remake | Java, LibGDX

Jun 2024 – Jul 2024

- Developed a 2D game using Java and LibGDX game development framework to create a remake based off games from the *Pokémon* franchise with a unique twist
- Increased engagement by 35% by designing a dynamic, interactive tile-based map using 2D arrays
- Boosted frame rate by 25% through efficient resource management and rendering techniques

ACTIVITIES

Wisconsin Neuromorphic Computing

Sep 2024 – Current

Chief Treasury Officer

Madison, WI

- Established a bank account with UW Credit Union to support the organization's financial needs
- Secured \$350 in startup funding to cover early operational needs before the account's establishment

NASA L'SPACE Misson Concept Academy

Jan 2025 – Current

Team Member

Tempe, AZ

• Utilized Siemens NX for CAD design and JMARS for data analysis, contributing to robust mission concepts

SKILLS

Languages: Java, Python, Lua, JavaScript, HTML/CSS, SQL, Node.js, React.js, C++, C Software: IntelliJ, PyCharm, Eclipse, VS Code, AWS, Langchain, Git, Bash, Docker