Jingman (Michelle) Wang

2406599440 | jwang408@jhu.edu
LinkedIn | Website

EDUCATION

Johns Hopkins University Baltimore, MD
Bachelor of Science Expected May 2025

- Majors: Computer Science, Cognitive Science
- GPA: 3.93
- Programming Languages: Java | Python | C | C++ | Javascript | Typescript | MATLAB | SQL
- Frameworks & Tools: Unity | Unreal Engine | React | HTML | Git | Postgres | Firebase | MongoDB | Docker

EXPERIENCE

Hull Street Energy May 2024- Present
Strategist and Software Engineer Bethesda, MD

- Created and maintained a comprehensive **database** and **server** for gas and power markets, aggregating key data such as trade contracts and ICE/Platts data. Built applications and Excel add-ins to visualize and analyze these datasets, supporting strategic decision-making.
- **Strategically** managed operational variables of power plants, including heat rate, ramp rate, and state variables (hot, warm, cold), to maximize gross margins. Leveraged **quantitative analysis** and Hull Street Energy's extensive expertise in both renewable and fossil fuel power generation.
- Spearheaded the development of a personalized large language model assistant using **AI** and **NLP**, integrated with a **proprietary database**. This innovative tool provided customized insights and enhanced the analytical capabilities of the energy sector.

DearYou Health January - May 2024
Software Engineer Washington, DC

- Led development of a cross-platform mental health support app using **React Native**, managing project organization and codebase with **Git**.
- Implemented AI-driven algorithm for matching students with counselors using **TensorFlow**, optimizing **neural network design** and ensuring secure user data handling with **Firebase**.

Quest2Learn January - October 2023
Software and UI/UX Engineer Baltimore, MD

- Developed an immersive AR experience with hyperrealistic 3D models and interactive modules using **Unity** and **React3Fiber**, in collaboration with CUHK University, resulting in a 15% improvement in user satisfaction through comprehensive testing and user feedback.

NOTABLE PROJECTS

JHU Delineo August 2023 - Present

- Collaborated with **AWS** to integrate Mass Crowd AI for simulating crowd movement and infection patterns in airports on **UE5**, enhancing disease spread modeling accuracy.
- Developed the "Intervention Manager" module, allowing users to define and apply interventions within simulations, utilizing **Python** for backend logic and **React** for frontend implementation.

JHU CBID VectorCam June - August 2023

- Developed an Android app for vector surveillance, providing vector control in malaria prevention and elimination in sub-Saharan Africa. Leveraged **Java** and **Android Studio** to improve mosquito classification accuracy.
- Implemented advanced image processing and **computer vision** technique (YOLO - you only look once) for rapid mosquito analysis, resulting in a remarkable 40% accuracy improvement.

NLP Tagging Project (Python)

- Attained over 95% accuracy in tag prediction utilizing taggers based on **HMM** and **CRF**, incorporating a biRNN for context feature extraction.

NOTABLE REWARDS

- Received the FastForwardU Summer Incubator Award $5000, Georgia Tech $500 for my startup GooseCart.
- Received the Singhal Family Entrepreneurship Award and the 2023 Dean's Design Award, securing $20,000 in funding for Quest2Learn.
- Earned a presentation slot at the 2022 ASCEND conference with my proposal with Nathaniel Gordon, titled "Spacecraft Diagnostic Generation from Remote Sensing for OSAM Mission".