Yiwei Liu

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Education

University of Waterloo, BS in Computer Science (AI Specialist)   Sept 2020 – May 2025
- GPA: 88/100, obtained Academic Excellent Standing and Term Distinction for all terms
- **Awards:** President's Scholarship of Distinction in 2021
- **Coursework:** Machine Learning, Artificial Intelligence, Application Development, Computer Networks

Experience

Software Engineer Intern, NielsenIQ – Pytorch, Tenserflow, Docker, Azure AI   May 2022 – Aug 2022
- Developed a recommendation algorithm using word vectorization and comparative models, enhancing product suggestions based on user interactions
- Engineered a multi-layer neural network for product classification, improving accuracy through data cleaning and model optimization
- Built and tested MLOps tools like early stopping and grid optimization within a Python library for automated model training
- Contributed to the development of "NIQ Ask Arthur," a generative AI tool designed to simplify data interpretation and accelerate insights through conversational data exploration

Software Developer Intern, NielsenIQ – Dijango, Pandas Jenkins, MS Azure   Jan 2023 – Aug 2023
- Collaborated with a team to develop a web application, enabling users to visually validate and analyze stored data on Microsoft Azure
- Designed and implemented data access and logging systems with secure storage solutions to safeguard user and data integrity
- Optimized the UI/UX to enhance user onboarding and guidance, particularly for first-time users, ensuring a streamlined and intuitive experience
- Increased data analysis efficiency while minimizing data exposure risks by isolating user environments from real datasets, maintaining strict data protection protocols

Projects

Calendar App   **Android, AWS, MangoDB**

Developed an AI-powered Android calendar application with advanced event management capabilities, allowing users to mark important moments, track moods, and interact with an embedded LLM for task summaries, event milestones, and to-do list generation

PlantTraits2024 - FGVC11   **Pytorch, Sk-learn, Numpy**

Participated in the PlantTraits2024 - FGVC11 project, leveraging Convolutional Neural Networks to predict plant traits from citizen science photographs and ancillary data, enhancing AI's capability to analyze climate, soil, and satellite information for accurate plant property identification

Accessibility Solutions   **PyTTSx3, OpenCV**

Released accessibility software, including color-blind filters and screen readers, improving digital device usability for visually impaired users, benefiting over 500 individuals in the community.

Proficiency

Languages: Python, Kotlin, Java, C++/C, SQL, Bash

Tools & Platforms: Microsoft Azure, AWS, Git, MangoDB, Docker, Jenkins

Skills: Problem-Solving, Collaboration, Adaptability, Communication, Time Management, Attention to Detail