Jeffery Wu

416-806-0675 | Personal Site | Email | LinkedIn | Github

EDUCATION

Queen's University

Kingston, ON

Bachelor of Computing, Computer Science, Minor in Mathematics, GPA 4.0, Dean's List

Sep. 2023 - Apr. 2027

EXPERIENCE

AI Researcher

Kingston, ON

QMind

Sept. 2024 - Present

- Researched SAM-2 applications in self-driving vehicle vision, implemented use of SAM-2 in training data of adverse weather conditions, and measured uncertainty of such applications
- Analyzed possible deep learning model calibration using Evidential Neural Networks (ENN) & Uncertainty Aware Training (UAT), advised for possible methods of implementation
- Presented findings on uncertainty-aware adapters for SAM models; adapted model for car vision application in uncertain weather situations

Computing Society Year Representative

Kingston, ON

Queen's University

Dec. 2023 - Present

- Campaigned to over 300 computer science students, securing election as a year representative
- Organized and promoted student activities to improve visibility and representation for COMPSA
- Engaged with the computing student body to encourage the passing of legislation to increase the COMPSA mandatory fee by 130% increasing funding

Hackathon Lead Organizer

Richmond Hill, ON

York Region District School Board

Sept. 2021 - June 2023

- Organized a 350-participant hackathon, resulting in 70+ student projects
- Led a group of more than 15 students to adapt the previously online hackathon to an in-person one, organizing 10+ supervisors, and partnering with over 15 sponsors
- Managed a budget of several thousand dollars, funding 20+ prizes and boosting registration and engagement in computer science

Projects

FittingRoom | React, Tailwind CSS, Express, MongoDB, Auth0, Figma, Google Colab

Dec. 2023 – Jan. 2024

- Developed a fully interactive and ready-to-launch site for FittingRoom, a website which allows users to preview what clothes will look on them before purchasing
- Designed and implemented a login system with Auth0 which saves users photos using MongoDB and retrieves them upon request
- Integrated HuggingFace API to accelerate image generation, reducing processing time by several hours

Autodrive $\mid C++, ROS2$

Sept. 2024 – Present

- Implemented the turn signal decider that accounted for distance, completing it 2 weeks ahead of schedule.
- Researched different pathfinding algorithms to optimize for large edge graphs, improving the efficiency of the vehicle's search and path
- Re-created the main D*Lite algorithm for the pathfinding node, achieving 30% better results compared to alternatives

Queens Wed Development Club | HTML, CSS, Javascript, React, Tailwind

Oct. 2023 – Present

- Designed the client-side interface with Figma, optimizing for higher visitor retention and click-through rates
- Implemented the designs with React and Tailwind, creating an fully interactive site, which updates to display times, current board games, sign up sheets

TECHNICAL SKILLS AND MORE INFORMATION

Languages: Python, C#, C++, Java, JS, Bash, Regex, SQL

Developer Tools: Git, Visual Studio Code, Node.js, Unity

Libraries & Frameworks: React, Tailwind, Pandas, NumPy, Matplotlib

Interests: Road Biking, History, Nature Photography, Hackathons, Charity Work, Programming Puzzles