JASON WEI

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EDUCATION

Computer Science Specialization, Bachelor of Computing Honours, AI Option   **Kingston, ON**
Queen's University: 4.20/4.3 GPA   *Expected May 2026*

LEADERSHIP EXPERIENCE

Perception Director   **Kingston, ON**
GM-SAE Queen's AutoDrive   *March 2024 – Present*
- Leading a team of 30 undergraduates & 3 graduate research assistants in implementing 3D LiDAR object detection, sensor fusion, and calibration, to enhance system reliability and robustness
- Placed 3rd place in the intersection challenge by successfully integrating & deploying our perception systems
- Achieved a 112% increase in camera-based object detection speed using Python by assisting in optimising the detection pipeline, refining algorithms, and eliminating performance bottlenecks
- Managing 80k+ annotated image datasets in Roboflow to train YOLOv8 models for detection accuracy
- Coordinating the planning and execution of modular projects, while establishing clear timelines and appointing sub-teams for effective delivery

WORK EXPERIENCE

Teaching Assistant   **Kingston, ON**
Computer Architecture – CISC 221   *September 2024 – Present*
- Conducting in-person office hours to provide 1-on-1 guidance and clarification regarding the course material, assignments, and marked evaluations, resulting in better student comprehension
- Explaining core concepts such as machine representation, assembly, digital logic, and memory architecture

Full Stack Development Intern   **Ottawa, ON**
Department of National Defence – DDACSI   *May 2024 – August 2024*
- Architected MongoDB schemas and developed data manipulation services, seamlessly integrating front-end with back-end using Apollo GraphQL, while testing and validating with Jest
- Delivered a 43% reduction in component code by refactoring legacy JavaScript to TypeScript, eliminating redundant code, and enhancing reusability, leading to a more scalable and maintainable codebase
- Achieved a 20% increase in total app users by implementing and designing interactive React components and leveraging Cypress end-to-end (E2E) testing to ensure robust functionality
- Resolved 116 tickets by utilising Azure DevOps and Git for effective source control management

Software Development Intern   **Kingston, ON**
Department of National Defence – CADTC   *November 2023 – April 2024*
- Reduced manual workload by 90% through the development and implementation of PowerShell scripts to streamline and automate the generation of essential files in an MVC architecture
- Leveraged C#, Bootstrap, and ASP.NET Core to develop internal web applications using Razor Pages

Web Project Lead Intern   **Remote / Toronto, ON**
Canadian Private Copying Collective (CPCC)   *August 2023 – October 2023*
- Led the migration of ~80k words from the client's webpage, revitalising UI/UX & ensuring content integrity

Web Development & Design Intern   **Remote / Markham, ON**
ventureLAB   *June 2023 – August 2023*
- Achieved a 101% increase in event count and 70.2% growth in users through developing client web pages
- Drove website growth to a record 27000 monthly users through SEO enhancements and optimizations