Lok To (Ray) Kwan

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Summary

Results-driven and adaptive **Senior Software Developer** with a strong passion for innovation and continuous learning. Formally trained in **Computer Science** with **6 years** of professional experience developing for fast-paced, SaaS startup companies where his contributions had a significant impact on product features and direction. Ray excels at navigating complex codebases, improving code quality and implementing best practices. He is also a team player, praised by superiors for his exceptional communication and leadership skills in cultivating a high-performing and motivated team.

Technical Skills

Languages: Python, Javascript (ES6+), Typescript, Java
Framework/Library: React, Angular, Numpy, Pandas, SciPy
Databases: PostgreSQL, MySQL, Redis
DevOps: Docker, Linode, CI/CD
Workflow: Agile, Microservices, REST

Work Experience

Skatescribe   Markham, ON
Senior Software Developer & Team Lead   *Oct 2023 - Present*

- Led a team of **2 developers** and **1 UI/UX designer** to build critical features for our electron and web application
- Spearheaded the planning and development of a 6-month project leading to a 25% reduction in cycle time, enhanced user experience, a cleaner and more maintainable codebase, and improved data accuracy and reliability
- Collaborated with stakeholders and management to define technical roadmaps, break down requirements into actionable development tasks, and align timelines and scope to balance feasibility and impact
- Configured and managed containerized environments using Docker for consistent and scalable deployments
- Facilitated daily stand-ups, sprint planning, and retrospectives to ensure efficient workflow, conducted annual performance reviews, and provided ongoing feedback to support up-to-date best practices and professional growth
- **Achieved:** Strong leadership and communication skills to foster an efficient, motivated, and high-performing team

Full Stack Software Developer   *May 2021 – Oct 2023*

- Developed an **Electron** app that captures any skate blade's shape with 0.5μm accuracy using a laser profiler, enabling users to customize their blade's geometry with a 0.1μm tolerance on a Tormach CNC machine
- Prototyped a **ReactJS**-based web application for operators to record and track customer order history
- Applied **Savitzky-Golay filtering** and **spline regression** to enhance 2D blade images from the laser profiler, dynamically minimizing errors in approximating the noisy image with G1 continuous B-splines
- Implemented algorithms to convert B-splines into segments that can be processed by the CNC machine for cutting
- **Achieved**: The ability to work independently, research and apply new technologies, and take ownership of projects

Cognitive Centivizer   University of Toronto
Full Stack Software Developer   *Sept 2020 – May 2021*

- Created a game **React** and **NodeJS** to collect and organize participant data to be used by psychology students
- Guided the team in implementing the best software practices, ensuring a consistent and maintainable codebase
- **Achieved**: Product improvement by aligning and strengthening development practices with the team

Autocase   Toronto, ON
Full Stack Software Developer   *May 2019 – April 2020*

- Translated research models into an app that measures the costs and benefits of a building in **AngularJS** and **Python**
- Created efficient and reliable python scripts to aggregate 150+ GB of NC/CSV files into pandas within 8 hrs

Education

Computer Science Specialist (CGPA: 3.61)   University of Toronto (2016 - 2021)