

RAY KWAN

SENIOR SOFTWARE ENGINEER

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SUMMARY

Software Engineer with 6+ years of experience building precise manufacturing systems and full-stack software. Proven record of leading teams to deliver high-performance CNC and laser vision solutions adopted by NHL teams and pro shops across North America.

WORK EXPERIENCE

LEAD SOFTWARE ENGINEER

June 2023 - present

SKATESCRIBE

- Managed a cross-functional team of **6 engineers** to develop advanced features on our automated skate sharpener and profiler, driving adoption among **5+ NHL/AHL teams** and 10+ pro shops
- Reviewed major partnership contracts for **47x expansion** (17 to 700+ machines), identifying and negotiating resolution of unfair terms and workload imbalances
- Architected to **microservices** refactor to decouple core business logic, decreasing cycle time by **25%** and improving data accuracy by **70%**.

FULL STACK DEVELOPER

May 2021 - June 2023

SKATESCRIBE

- Prototyped skate profiler and sharpener by integrating a laser profiler with a CNC using **Python, React, and PSQL**.
- Invented proprietary algorithms achieving $\pm 1 \mu\text{m}$ precision via advanced signal processing and regression, and built a scalable, high-availability cloud infrastructure on Linode with Docker and NGINX.

FULL STACK DEVELOPER

Sept 2020 - May 2021

COGNITIVE CENTIVIZER

- Developed **React** and **Node.js** games to measure reaction time and memory, integrating real-time data collection and analytics for 100+ participants.

FULL STACK DEVELOPER

May 2019 - June 2020

AUTOCASE (Internship)

- Developed a cost-benefit analysis platform (**AngularJS** and **Python**) transforming economic research models into interactive visualizations of building design impacts.

SKILLS

Languages & Frameworks

- Python
- Flask
- Javascript
- ReactJS/ NextJS
- AngularJS
- NodeJS
- Java
- PSQL

Libraries

- Numpy/ Scipy
- Pandas
- MUI

DevOps

- Docker
- Linode
- Github Actions

WEBSITES

- [Website](#)
- [LinkedIn](#)

Projects

- [Music Player](#)
- [Wordle Copycat](#)
- [Graphing Library](#)
- [ATM](#)

EDUCATION

B.Sc. Computer Science
University of Toronto
2016 - 2021

Digital Growth Marketing
Talent Accelerator