

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 DEVELOPER SKATESCRIBE

June 2023 - present

- Managed a cross-functional team of **5 engineers and designers** to develop advanced features on our automated skate sharpener/ profiler, driving adoption among 5+ NHL/AHL teams and 10+ pro shops
- Implemented SEO and content strategies, achieving a 40% growth in website and social media traffic in 3 months.
- Reviewed major partnership contracts for 47x expansion (17 to 700+ machines), identifying unfair contract terms and workload imbalances.
- Refactored to **microservices** architecture, decreasing support calls by 10%, increasing efficiency by 25% and improving data accuracy by 70%

FULL STACK DEVELOPER SKATESCRIBE

May 2021 - June 2023

- 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 COGNITIVE CENTIVIZER

Sept 2020 - May 2021

- 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 AUTOCASE (Internship)

May 2019 - June 2020

- Developed a cost-benefit analysis platform (**AngularJS** & **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