

# 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

### SKATESCRIBE

Markham, ON

#### Lead Software Engineer

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 3 NHL/AHL teams and 3 pro shops
- Implemented SEO and content strategies, achieving a 15% 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

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**.

### COGNITIVE CENTIVIZER

University of Toronto, ON

#### Full Stack Developer (Part-time)

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.

### AUTOCASE

Toronto, ON

#### Full Stack Developer (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

- Proficient in Python, Javascript, Java, SQL, and Git version control. Strong knowledge of algorithms, data structures, software design patterns, and system architecture
- Excellent problem-solving and analytical skills
- Experienced in project management and team leadership
- Strong communication and interpersonal skills

## WEBSITE & SOCIALS

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

## Projects

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

## EDUCATION

B.Sc. Computer Science  
University of Toronto (May 2021)

High Distinction, Dean's List  
CGPA: 3.71