

ANTON LEE

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SKILLS

Languages: Python, C/C++, Java, JavaScript, HTML/CSS

Tools and Frameworks: Git, Figma, Excel, OpenCV, TensorFlow, React.js, Google Cloud, AWS, CI/CD

EXPERIENCE

Hello World | *First Place @ UofT Schools BluesHacks 2024*

Jan. 2024

Python, JavaScript, OpenCV, OpenPose, Pyinput, MediaPipe, Google Cloud API

- **Developed** web app with an animated two-way sign language interpreter between English and ASL, **enhancing communication accuracy by 35%** for the hearing-impaired, by **integrating a pre-trained AI model** for translation.
- **Created** a frame **compression** and processing **algorithm**, **reducing** average processing time to **0.8 seconds**, achieving **95%** translation accuracy from ASL to English, by leveraging **OpenPose, TensorFlow, and MediaPipe**.

Verbate | *Awarded 'Best use of AI' @ IEEE University of Cincinnati Hackathon 2023*

Nov. 2023

Python, GPT-4.0, AWS, React.js, Next.js

- **Integrated ChatGPT-4.0 and AWS Polly**, creating a **GenAI**-powered interview preparation app featuring **voice input** and **text-to-speech** capabilities, enhancing user **interaction** and **engagement**.
- **Utilized Node.js, Next.js, React.js, Index.js, and Radix UI** to **build a responsive front-end** and **efficient back-end infrastructure**, enabling a **seamless** user experience.

SkinSight

Aug. 2023

Python, Flask, OpenCV, PyTorch, TensorFlow

- **Designed** an app built with a **machine learning algorithm** to detect skin cancer from pictures of skin irregularities by using **Flask** and **implementing OpenCV, PyTorch, and TensorFlow**.
- **Integrated the HAM10000 dataset** to **improve** the model's ability to **analyze** skin images and **increase** diagnostic **accuracy** to **over 82%**, through the use of **real-world** dermatological **data**.

HandPilot | *First Place @ YRHacks 2023*

Mar. 2023

Python, OpenCV, MediaPipe

- **Developed** an **AI-powered app** to capture hand movement to enable **real-time** mouse-free cursor control, by **implementing computer vision techniques**.
- **Utilized Tkinter for UI, OpenCV and MediaPipe** for hand-tracking via **computer vision**, and **PyInput** for seamless cursor control integration.

EXTRACURRICULAR ACTIVITIES

1st Markham MedVents Scouts Canada

Jan. 2022 – Oct. 2024

Company Leader

Markham, ON

- Provided emergency care to injured individuals at **high-profile events** with over **50,000 attendees** such as conventions and sports tournaments, ensuring rapid response and treatment.
- **Organized** and led first-aid training sessions for scouts, **improving** their **proficiency** in using medical equipment (e.g. tourniquets, bandages, splints) through hands-on instruction.

e3 Toronto

Oct. 2023 – Jun. 2024

Public Speaking Mentor

Richmond Hill, ON

- Mentored students and **taught** public speaking lessons, enhancing students' **communication skills** and confidence, by providing structured instruction and personalized feedback.
- **Organized** public speaking events with notable guests, including the **mayor** of Richmond Hill, increasing **event engagement** and providing valuable networking opportunities for participants.

AWARDS

Ontario Principals' Council: Principal's Award for Student Leadership

Jun. 2024

- Award presented by the principal to a Grade 12 student who has demonstrated qualities of leadership

YRDSB Director's Achievement Award

Jun. 2024

- Award presented to Grade 12 students who have made significant accomplishments in each secondary school as determined by the principal and staff members

EDUCATION

University of Waterloo

Sep. 2024 – Present

Candidate for Bachelor of Applied Science in Computer Engineering

Waterloo, ON