

Stone Yang

stoneyang17@gmail.com | 647-580-9278 | stoneyang.ca | [GitHub](#) | [LinkedIn](#)

EDUCATION

University of Toronto

September 2022 - Present

Bachelor of Applied Science in Engineering Science | Machine Intelligence Major

- 2x Dean's Honour List
- **Relevant Coursework:** Calculus I, II, Vector Calculus, Data Structures and Algorithms, Object Oriented Programming, Digital & Computer Systems, Linear Algebra, Ordinary Differential Equations, Engineering Design (Praxis)

PROJECTS

Wave Oct 2023 - Present

- Developed a computer vision program with Python that allows users to control their computers through hand gestures
- Engineered, trained, and tested a machine learning algorithm with a Feed-Forward Neural Network using TensorFlow and Keras, achieving proficiency (95% accuracy) in recognizing over 20 distinct hand signs and actions
- Currently exploring alternative model architectures (LSTM, CNN) to improve model performance for complex gestures

ChefGPT Oct 2023 - Present

- Utilized YOLOv8 and GPT-4-Vision API to develop an app that generates food recipes based on photos of the user's fridge
- Currently building a hosting web page with HTML, CSS, Django, and PostgreSQL

PlanIt Sept 2023 - Present

- Created a minimalist Calendar/To-Do app; constructed the user interface with HTML, CSS, and JavaScript
- Developed the backend infrastructure using Django and PostgreSQL and hosted the webpage with Vercel and Railway.
- Currently implementing AI/ML algorithms with PyTorch to create "smart calendaring" functionalities.

EXTRACURRICULARS

UTFR (University of Toronto Formula Racing)

Sept 2023 - Present

Deep Learning and Perception Member

- Worked with ROS to implement objection detection algorithms to locate racetrack obstacles
- Implemented functions to analyze and compare LiDAR and stereo-depth data

Generative AI Artist

May 2023 - Aug 2023

Self-employed

- Utilized Stable Diffusion 1.5 with various LoRA and Textual Inversion models to engineer prompts and generate AI artwork. Styles varied from cartoon to hyperrealistic
- Trained LoRA models from 100+ pictures using Kohya; commissioned by 30+ clients to create custom AI images

Physics Club

Sept 2021 - Apr 2022

Co-founder

- Managed club logistics such as funding, promotion, and events; grew the club to over 70 members
- Hosted weekly meetings and taught topic-area workshops on theoretical knowledge and practical skills (CAD, programming, etc.)
- Led sponsorship and funding efforts to finance activities; selected as the recipient of a \$1500 LabRoots STEM Scholarship

SKILLS

- **Programming:** Python, C, Java, HTML, CSS, JavaScript, MATLAB, Arduino, SystemVerilog, RISC-V Assembly
- **Tools/Frameworks:** Django, PostgreSQL, Git/Github, TensorFlow, Stable Diffusion, Autodesk Inventor, Fusion 360, Cura, COMSOL Multiphysics, Microsoft Word, Excel, Powerpoint, Modelsim