

Tony Wang

778-926-2867 | tkwang312@gmail.com | [linkedin.com/in/tony-wang-041119tw](https://www.linkedin.com/in/tony-wang-041119tw) | github.com/tkwang312

EDUCATION

University of Toronto

Bachelor of Science Mathematics and Statistics, Minor in Computer Science

Toronto, ON

September. 2022 – June 2026

PROJECTS

WakeUpAlarm | *Swift, SwiftUI*

October 2024 – Present

- Developed an iOS alarm and clock app in SwiftUI with features such as customizable alarm settings, snooze options, and notification handling.
- Utilized Core Data and UserDefaults to manage user preferences and track alarm data.

MangaFoo | *Python, FastAPI, PyTorch, ReactJS, PostgreSQL, Docker, AWS S3*

January 2024 – Present

- Built a full-stack web application with a FastAPI backend and ReactJS frontend, enabling manga-style image generation.
- Implemented AWS EC2 instances to run Stable Diffusion models, allowing scalable image processing and storage in AWS S3.
- Utilized PostgreSQL to manage user data, including image generation history and metadata.

Pet Pal | *Java, MongoDB, Google Cloud, Git*

September 2023 – December 2023

- Created a pet-matching app using Clean Architecture principles and OOP in Java, with a user-friendly interface inspired by Tinder.
- Integrated Google Cloud for image storage and MongoDB for handling user and pet data.

Leetcode Flashcards | *NodeJS, Firebase, ReactJS*

June 2024 – July 2024

- Developed an SRS-based flashcard app to help users practice Leetcode problems, leveraging Firebase for data storage and a ReactJS frontend.
- Integrated user authentication and problem tracking with Firebase.

Mental Health Chatbot | *TensorFlow, Python, Jupyter Notebook*

September 2023 – January 2024

- Created a chatbot using a multi-head attention transformer model based on *Attention is All You Need*.
- Designed the chatbot for interactive mental health support, with responses tuned to user sentiment.

AI Image Generator | *Python, PyTorch, FastAPI, Gradio*

July 2024 – August 2024

- Created a web app using PyTorch and FastAPI to generate images based on user input, accessible via a Gradio interface.

EXPERIENCE

Tutor and Instructor

September 2020 – Present

Freelance

Toronto, ON

- Tutored university-level computer science and mathematics courses, supporting students from the University of Toronto, Queen's University, and Duke University.
- Led robotics and circuits classes for a Vancouver-based educational agency, creating engaging lessons on pre-calculus concepts.

TECHNICAL SKILLS

Languages: Python, Java, JavaScript, Swift, TypeScript, HTML, CSS, R

Frameworks: FastAPI, PyTorch, Gradio, NodeJS, ReactJS, TensorFlow, ThreeJS

Cloud and Databases: AWS S3/EC2, Google Cloud API, Firebase, MongoDB, PostgreSQL

Tools: Git, Docker, Visual Studio, PyCharm, IntelliJ, Eclipse, XCode, TailwindCSS, Vite, GitHub

Other: Pandas, NumPy, Matplotlib, Hugging Face, Design Patterns, OOP, Clean Architecture