

Gia Huy Thai

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EDUCATION

University of Toronto

Honours Bachelor of Science in Applied Statistics, Minor in Computer Science

Mississauga, ON

September 2020 – June 2025

TECHNICAL SKILLS

Languages: Python, Java, Typescript, JavaScript, C/C#, SQL, HTML/CSS

Frameworks: React, Node.js, Flask, FastAPI, Express.js, Next.js, React Native, Tensorflow, Pytorch

Data Science: Pandas, NumPy, Matplotlib, OpenCV, Scikit-learn, Statistical Analysis, Computer Vision

Developer Tools: Git, AWS, Google Cloud Platform, Docker, RESTful APIs, Excel, Word, Powerpoint

Databases: MongoDB, PostgreSQL, MySQL, JSON

EXPERIENCE

Student Software Developer

Jan 2025 – June 2025

UTM Google Developer Student Clubs

Mississauga, ON

- Architected PlogGo's **React-based** frontend, integrated with a Flask backend via Axios, enhancing cross-platform functionality and responsiveness, resulting in a **40%** increase in user engagement
- Created a **PostgreSQL** database solution for storing user account details, session data, and authentication credentials, resulting in a **30%** improvement in query response times for user-related data retrieval
- Engineered a **JWT authentication** workflow with token blacklisting and protected route validation, proactively securing APIs against session hijacking and unauthorized access
- Trained a **YOLOv11** model on the TACO dataset with **PyTorch**, achieving **90%** precision in litter detection
- Developed a scalable **WebSocket** architecture with **Socket.IO**, reducing data sync latency by **40%** and delivering seamless real-time plogging experiences
- Constructed a robust backend architecture on **AWS** using **EC2**, **S3**, and **Lambda**, improving the application's scalability to handle peak loads during high-traffic periods, with **zero** downtime

PROJECTS

FireSight | *Python, JavaScript, HTML, CSS, Flask, PostgreSQL, XGBoost, GPT4All, Git*

February 2025

- Developed **FireSight** at **Genai Genesis 2025**, a full-stack AI wildfire risk assessment platform using **XGBoost** and **Random Forest** to predict wildfires from satellite and environmental data
- Built a scalable **Flask** backend for real-time satellite data processing, cutting risk assessment time by **60%**
- Designed a spatially-aware system with **PostgreSQL** and **PostGIS**, enabling high-performance geospatial wildfire risk queries
- Created an interactive web UI with **HTML/CSS**, visualizing live risk maps and enabling data-driven decision making
- Engineered a geospatial data pipeline improving **XGBoost** model accuracy to **95%** and cutting **GPT4All** processing time by **50%**

EduBuddy | *Python, Javascript, Node.js, Express.js, PyPDF2, Git*

September 2024

- Built a full-stack app at **HacktheHill 2024** using **Node.js**, **Express.js**, and **PyPDF2** to automate syllabus data extraction, saving students **3+ hours/semester** of manual entry
- Integrated **OpenAI** and **Ollama** models to extract course codes and deadlines from syllabi with **95% accuracy**, saving **60 minutes per syllabus**
- Engineered a data ingestion pipeline using **Node.js** child processes to run **Python** scripts, improving throughput and reducing processing time by **60%**

AWARDS AND ACKNOWLEDGEMENTS

Winner – United Nations & One Degree Cooler Best Climate Change & Sustainability AI Hack at Genai Genesis (Mar 2025)

Winner – Second Place at EWB Moral Code Hackathon (May 2024)

Honour Roll Student – Department of Mathematical and Computer Sciences (2023–2024)