Hanz Nathan Po

(647)-674-2006 | hanznathanpo@gmail.com | linkedin.com/in/hanznathanpo | github.com/HanzPo | hanzpo.com

Education

University of Waterloo Waterloo, ON
Candidate for Bachelor of Computer Science (Co-op) *Sep. 2024 – Apr. 2029*

Skills

Programming Languages: Python, C++, JavaScript, TypeScript, C#, Java, C, BASIC, Scheme (Racket)
Libraries: React, Express, Flask, PyTorch, Scipy, Pandas, NumPy, Matplotlib, Scikit-learn, Swing
Tools: Git, Jupyter Notebook, Unity Engine, Vite, Node.js, Visual Studio Code, Github, Trello, Figma, Jira
Languages: English (Native), Hokkien, Mandarin, Tagalog, French (A2)

Experience

Senior Data Quality Specialist - Advanced Coding Team Sept. 2024 – Present
Cohere *Toronto, ON*

- Labelled, ranked, and audited **machine learning** training data, improving the coding capabilities of **Large Language Models (LLMs)**
- Recommended optimizations and provided feedback for prompt completions in **Python, JavaScript, and C/C++**

Quantitative/Machine Learning Developer Nov. 2024 – Present
Wat Street *Waterloo, ON*

- Utilized **PyTorch** to develop neural networks in image classification tasks, reaching an accuracy level of 97.5%
- Employed **Scipy** to create an implied volatility algorithm using the Newton-Raphson method
- Developed machine learning models to generate predictions on future stock prices

Projects

Intuitscape - Intuitive node-based learning tool
Python, JavaScript, React.js, Flask, Google Vertex AI Mar. 2024

- Designed and developed intuitscape, a web application for generating a node-based mind map about any topic using **React, JavaScript, React Flow, and Flask**
- Integrated an intuitive and accessible user interface with the **Google Vertex AI** API in order to generate subtopics and descriptions to help users learn more about their topic of choice.

GitGest - Repository commit history summarization tool
Python, JavaScript, React.js, Flask, Github API, Cohere API Oct. 2023

- Developed the backend logic of GitGest, a tool that provides developers with commit history summaries using **Flask**, including **Cohere API** and **Github API** integration with **OAuth** user authentication.
- Worked with designers and frontend developers to transform **Figma** designs into a functional and user-friendly web application, using tools such as **Git** and **GitHub**.

Albumify - Automated album covers for Spotify playlists
Python, JavaScript, React.js, Chakra UI, FastAPI Sept. 2023

- Developed the user interface and frontend logic for Albumify, a web application aimed at automatic album cover generation for Spotify playlists, using **React, JavaScript, and Chakra UI**, including **Spotify API** integration.
- Collaborated with a multidisciplinary team of four to bring Albumify from concept to reality, from flowcharts and wireframes, to a **Figma** design, then a working prototype, while using tools such as **Git** and **Trello**.

Exploring Factors in Clean Energy Adoption Worldwide
Python, Pandas, Scikit-learn, Matplotlib Nov. 2021 – Feb. 2022

- Using **regression models**, analyzed the correlation between economic factors such as GDP, Human Development Index scores (HDI) against how much of a country's energy comes from emission-free and renewable sources.
- Utilized **Pandas** to import and parse large datasets, observed patterns using **Scikit-learn's** regression functions, then visualized interesting findings through **Matplotlib & Geopandas** (world maps, scatter plots, line graphs).
- One model achieved a **correlation coefficient of 0.43**, indicating a moderate positive correlation between economic development and the use of clean energy