Ben Xiao

Software Developer & Machine Learning Engineer

benxiao289@gmail.com benxiao.io linkedin.com/in/benxiaoio github.com/Benoolean

Experience

BlackBerry QNX
Sep 2021 - Dec 2021

Machine Learning Engineer
Ontario, Canada

- Leveraged Python multiprocessing to reduce data extraction and processes by 72%.
- Used TensorFlow to create LSTM and CNN models for classifying false positives in static code analysis to increase safety certification performance and accuracy.
- Created analytic tools and visuals in React and Python to help diagnose processes in multivariate regression analysis.

`Python` `TypeScript` `SQL` `Machine Learning` `NLP` `Deep Learning` `React`

Rogers Communications
Jan 2021 - Apr 2021

Software Developer
Ontario, Canada

- Designed time series forecast models in Python to predict and simulate 5G technology data usage from 5 million users.
- Built Canada-wide KPIs dashboard using Node.js and Python to help visualize data in real time and alert for irregular patterns for the analytics team.
- Optimized graph manipulation processes by applying Kruskal's and Prim's algorithms in repository layers which reduced runtime by 68%.

`Python` `TypeScript` `Node.js` `Flask` `Machine Learning` `Deep Learning`

The Weather Network
May 2020 - Aug 2020

Software Developer
Ontario, Canada

- Scripted efficient heavy load SQL queries in GCP BigQuery to reduce data retrieval costs.
- Refactored Airflow instances in Python to streamline multiple tasks, reducing runtime caused by IO-bound processes.
- Developed live data visuals using Python's Flask and Plotly frameworks as a crucial debugging tool for data engineers.
- Detected anomalies in weekly data using machine learning with Python to notify teams to launch a deeper investigation.

`Python` `SQL` `.NET` `Flask` `Machine Learning`

BDO
May 2019 - Aug 2019

Full Stack Developer
Ontario, Canada

- Created enterprise solutions using .NET Core with Angular integration to boost and monitor Ontario's agriculture industry.
- Implemented dimension reduction techniques in multilayer data to linearize runtime for index and search operations.

`C#` `.NET` `Angular`

Skills

`Python` `TypeScript` `C++` `SQL` `Node.js` `Flask` `Django` `Machine Learning` `NLP` `Deep Learning` `React` `Angular`

Education

University of Waterloo
Sep 2018 - Apr 2023

Bachelors of Mathematics - Honors Statistics with CS Minor
Ontario, Canada