Evan Pai

(647) 622-4699 | evan4217@gmail.com | evanpai.com | linkedin.com/in/evan-pai | github.com/Wubaboo

Recent graduate Software Engineer with a passion for creating elegant and impactful projects. Seeking a software engineering position with abundant opportunities for learning and growth.

Skills

Languages: Python, JavaScript, C, C++, R
Technologies: SQL, React, React Native, AWS, Flask, NumPy, pandas, PyTorch, OpenCV, Spark

Experience

Software Engineer/Data Science Intern - Thomson Reuters   **Jan 2021 - Aug 2021**

- Built a HTML **content extraction system** for use in a **fake news detection** pipeline by cross-referencing results from multiple Python libraries
- Extended the backend of an **automated curated newsletter**, informing subscribers of relevant industry trends while **logging user engagement** using **AWS DynamoDB, Flask** and **SparkPost**
- Evaluated and documented machine learning method for **parsing and extracting HTML content**
- Wrote Python scripts to modify metadata and validate strings to assist in a **facial recognition** and **image captioning pipeline**

Data Science Intern - Statistics Canada   **Sep 2019 - Dec 2019**

- Developed Python tools for a standardization of English and French metadata variables using **Natural Language Toolkit** to reform variables from a **many-to-many relationship** to a **one-to-one relationship**
- Managed a metadata database with **50,000+** entries and added components to automate procedures

Data Analyst - Sigma Corporation   **Feb 2019 - Apr 2019**

- **Predicted manufacturing times** of operations for over **400+** parts using regression, resulting in an optimized production schedule and **projections of labour costs** for all operations

Projects

OnlyOne   **Present**
React Native + AWS real-time word game

- Facilitates **real-time** cross-device connections using **AWS API Gateway WebSockets**
- Adopts a **serverless**, **scalable** architecture leveraging **AWS Lambda**
- **Optimizes costs** through **throttling**, **debouncing**, and automatic **clean-up timeouts** for **DynamoDB**

Memory Games 🔗   **Sep 2023**
React Native memory game collection

- Applies **graph theory concepts** to dynamically generate random paths in a maze

ytSheetMusic 🔗   **Mar 2023**
AWS EC2+S3, React, and Flask Web App to convert sheet music from YouTube URL to PDF

- Identifies and isolates regions of interest using **OpenCV Contour Detection**, merging results to PDF
- Prevents sheet music duplicates by calculating **structural similarity index** between images
- Reduced result processing time from ~1 minute to instantaneous output by caching images in **AWS S3**

Education

University of Waterloo   **Graduated 2022**
Bachelor of Mathematics – Computational Math
Minor in Computing
Minor in Combinatorics and Optimization