Joseph Mok

Email: hojinmok@gmail.com GitHub: github.com/hjmok
Portfolio: hjmok.github.io/josephmok_portfolio LinkedIn: linkedin.com/in/hojinjosephmok

Skills

Languages: Python, JavaScript, MATLAB, C++
ML Libraries: TensorFlow, Scikit-Learn, PyTorch, NumPy, Pandas, spaCy, NLTK, OpenCV, PySpark
Databases: MySQL, PostgreSQL, BigQuery
ML on Cloud: Docker, Kubernetes, Kubeflow, and Apache Airflow on Google Cloud Platform

Professional Experience

Fluence Analytics *Houston, TX*
Machine Learning & Automation Engineer, July 2021 – Present

- Created automated data preprocessing and visualization tools for faster data exploration
- Formatted output IoT data from ACOMP product onto BigQuery in Google Cloud Platform
- Set up Cloud Storage Buckets and Kubeflow Pipeline instances for data processing and model training
- Developed machine learning models using TensorFlow and Scikit-Learn for classification from ACOMP data
- Developed an RNN with LSTM with 0.96 F1-score using TensorFlow to detect baselines regions from detectors. Eliminated manual postprocessing of data by Application Scientist, saving several hours of labor

Yaya Foods Corp. *Toronto, ON*
Automation Engineer, July 2019 – July 2021

- Developed data mining process to extract IoT data, store in MySQL database, and presents it to Client application designed in Python and Ignition Automation software.
- Created machine learning models to predict pump power usage based on production transmitter data
- Lead the automation design for several SCADA systems by integrating PLCs, Ignition, and MySQL

Projects

(Please visit my portfolio website for more projects)

Income Prediction Pipeline with Kubeflow hjmok.github.io/josephmok_portfolio

- Developed TensorFlow, Scikit-Learn, PyTorch, and XGBoost models to predict user income
- Containerized each model in a Docker image and deployed onto a Kubeflow pipeline for continuous training

Chicago Taxi Fare Prediction with Apache Airflow hjmok.github.io/josephmok_portfolio

- Wrote a DAG on Apache Airflow by utilizing Cloud Composer on Google Cloud Platform
- Visualized resulted DAG and trained on the Chicago Taxi Fare

Breast Cancer Malignant or Benign Diagnosis hjmok.github.io/josephmok_portfolio/#/BC

- Applied Logistic Regression and K-Nearest Neighbor analysis to classify a Breast cancer dataset
- Loaded the data onto BigQuery in Google Cloud Platform and using Kubeflow for training along a pipeline

Stock Prices Prediction hjmok.github.io/josephmok_portfolio/#/StockPriceRNN

- Created an RNN with LSTM model on TensorFlow to predict AMD and Google Stock prices
- Resulting models were able to follow trend and scale of stock prices for quarterly and annual sequence sizes

Education

- University of Waterloo, **Bachelor of Applied Science, Honor's Mechanical Engineering,** June 2019
- Coursera, **Machine Learning on Google Cloud Platform with TensorFlow Certificate**, July 2021
- Coursera, **Google Cloud Machine Learning Engineer Certificate**, April 2022

9 Courses

- Google Cloud Big Data and Machine Learning Fundamentals
- How Google does Machine Learning
- Launching into Machine Learning
- TensorFlow on Google Cloud
- Feature Engineering
- Machine Learning in the Enterprise
- Production Machine Learning Systems
- MLOps (Machine Learning Operations) Fundamentals
- ML Pipelines on Google Cloud

Google Cloud

Apr 22, 2022

Google Cloud Training

Ho Jin Joseph Mok

has successfully completed the online, non-credit Professional Certificate

Preparing for Google Cloud Certification: Machine Learning Engineer

In this Professional Certificate, learners understood how to design, build, productionalize ML models to solve business challenges using Google Cloud. They experimented with end-to-end ML, learnt advanced ML to build production-ready ML models on Google Cloud.

Verify this certificate at:
https://https://coursera.org/verify/professional-cert/6DWU9554PFXM