DENNIS KIM

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EDUCATION

University of Waterloo   Dec. 2020

- Bachelor of Mathematics, Statistics | Minor in Computer Science

SKILLS

- **Languages:** Python, Java, Scala, Javascript (React/Redux), SQL
- **Data Science:** Spark, TensorFlow, Scikit-Learn, Pandas, NumPy, R
- **Technologies:** AWS**,** Kafka, Airflow, REST API, PostgreSQL, SQL Server, Elasticsearch, MongoDB, Bash, Git

EXPERIENCE

Novantas | Data Engineer Intern   Toronto, ON | Jan. 2020 - Apr. 2020

Python, Scala, SQL, Spark, Airflow and SQL Server

- Developed efficient and scalable ML pipelines for Certificate of Deposit marketing platforms, automating offline workflows to make accurate predictions on identifying prospective retail banking customers and recommend optimal rates
- Implemented anomaly detection in ETL pipelines, monitoring and reporting changes in metrics
- Integrated internal APIs with Jupyter notebooks to allow for more flexible and complex pre-production metrics testing

Northbridge Financial Corporation | Data Scientist Intern   Toronto, ON | May 2019 - Aug. 2019

R, SQL, SQL Server and Arcadia

- Constructed multiple anti-fraud initiatives by identifying malicious behaviour patterns in SQL, reducing investigation time and costs by $50,000+/year
- Optimized XGBoost fraud detection model with SMOTE method and hyperparameter tuning in R, improving AUC by 6%
- Developed R Shiny apps for end users to analyze and visualize claim data, currently being used by 10+ analysts and replaced existing Excel reports
- Created interactive dashboards to monitor and present weekly and monthly overview from claim data

JANA | Software Developer Intern   Aurora, ON | Sept. 2018 - Dec. 2018

Python (Flask, Pandas, NumPy), Dash, SQL and PostgreSQL

- Reconstructed and optimized code to handle large amounts of data in Python, reducing data processing and loading time of statistical model results by 92%
- Developed a web-based data management tool to help users filter and edit gas distribution pipeline data
- Designed and implemented interactive graphs to visualize gas pipeline risk predictions in Plotly

PROJECTS

Photo Validator

- Built a face detection app that recognizes faces from uploaded images in Python, React and AWS (S3, Lambda, API Gateway, Rekognition)

Spotify Playlist Controller

- Created a web app that allows users to share and skip Spotify music playlists with friends in Python (Django) and React

Twitter Streaming

- Built a real time data pipeline to stream live tweets with Kafka and Elasticsearch, visualizing trending topics with Kibana

Price Tracker

- Developed a web app that tracks price change from online stores and sends a notification email to users with Python (Flask) and MongoDB