Hanyu Xi

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Languages: Python, Java, C, C++, Objective-C, Swift, JavaScript, Bash, HTML&CSS, SQL

Frameworks and Tools: Django, Flask, Vue.js, React.js, Node.js, Firebase, AWS, Jenkins, Maven, Kafka, Airflow, Git, MongoDB, MySQL, Docker, Spark, Hadoop, Snowflake, Firebase

Professional Experience

Data Engineer

Q4 Inc, Toronto ON

Jul. 2021 - Present

Tools/Languages: Snowflake, SQL, AWS, Python, Amundsen

- Re-designed and optimized company's data pipeline architecture to support new products/initiatives
- Implemented data catalog and governance to make data more discoverable and easier to use

Backend Developer

IBM (Data and AI), Toronto ON

Jan. 2021 - Jun. 2021

Tools/Languages: C++, C, Linux/AIX, SQL

- Fixed a variety of defects and issues which improved Db2 application availability and scalability
- Assisted in developing new software features and tools for Db2 v12 release

Software Developer

Scotiabank, Toronto ON

Jun. 2019 - Dec. 2021

Tools/Languages: Django REST, Vue.js, Linux, Docker, Java, Kafka, Jenkins, Git, GCP, Airflow, Postgres

- Implemented new business features using OOP in Java and Python for an in-house risk calculation application; decreased the existing system's failure rate by 30%
- Developed a full stack web application (Vue.js, Django REST Framework, Kafka, Docker, PostgreSQL)
 enabling clients to streamline, modify and calculate the bank's trade data in real-time
- Revamped the risk data ETL layer from overnight batch process (data mapping and calculation) to realtime stream processing, reducing the processing time from 4 hours to 30 minutes
- Built automated testing and regression suite tools in Python to facilitate testing process
- Modernized internal risk data prediction application from on-premise servers to Google Cloud Platform for 20% cost savings as well as productivity improvements

Software Developer Intern

Trudell Medical. London ON

May. 2017 - Sep. 2018

Tools/Languages: Python Flask, HTML5/CSS3, D3.js, React.js, MySQL, Git

- Developed a web application to enable doctors to visualize patient data using Flask, D3.js and React.js
- Setup relational data models and configured the database to manage the medical data using MySQL
- Developed algorithms to calculate the total amount of medication patient inhaled for patient prescription adherence using aggregated clinical trial data from doctors

Education

M.Eng. in Computer Engineering – University of Toronto

Sep. 2020 – Present

- Relevant Coursework: Algorithms, Cloud Computing (AWS), Machine Learning, Creative Mobile Applications, Big Data Science (Hadoop, Spark, Azure), Parallel Programming, Advanced Data Systems
- Anticipated completion: May 2022 (part-time student)

B.E.Sc. in Mechatronic Systems Engineering – Western University

Sep. 2014 - April. 2019

- Dean's Honor Award (2015 2017)
- Hackathons: Top 6 for Hack Western 2 (2015),
 IBM Blue Mix First Prize for Montreal Angel Hackathon (2015)

Projects

Heatmap Calendar Project Python, Dash and Plotly module

- Developed a Python application that allows Python programmers and data analysts to develop heatmap calendar projects than uncovers previously hidden insights from their data
- Developed in Python using Dash and Plotly module

Tooti for iOS

Objective-C, Firebase

- Developed an iOS application that allows musicians to collaborate virtual in as real-time as possible, a live studio app.
- · Worked with several musicians in a multi-disciplinary team