

Arushan Sinnadurai

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WORK EXPERIENCE

Associate Data Engineer

July 2021 – Present

8x8 Inc, Ottawa, ON

- Engineered and launched event-driven ETL data pipelines in both real-time and non-real-time settings, leveraging Kafka and Flink, increasing data processing efficiency by 40% and reducing latency by 25%.
- Created a powerful Java Spring microservice that fetched data from a Postgres database, leading to a 20% improvement in search query performance.
- Engineered and maintained distributed systems for efficient data extraction, ingestion, and processing, reducing data processing time by 45% and enabling analysis of 1TB+ datasets within 2 hours.

Technology: Scala, Java, MySQL, Kafka, Spark, Flink

Software Developer Intern

September 2019 – September 2020

Kinaxis, Ottawa, ON

- Developed automated test cases using JUnit to increase code coverage by 30%, resulting in a more robust and reliable software product.
- Engineered and implemented a high-performance microservice leveraging Kafka for efficient large-scale data transfer to a database, improving data processing speed by 40% and reducing latency by 30%.
- Streamlined the deployment process by leveraging cutting-edge technologies such as Docker and Helm 3, resulting in faster, more efficient, and more reliable software releases.

Technology: Java, C#, Docker, Helm 3, Python, Postgres

APPLIED PROJECTS

Workshop Tech Lead

June 2021 – Mar 2022

Carleton Artificial Intelligence Society

- Lead workshops to teach over 50 students various concepts and ideas in the field of artificial intelligence and machine learning.
- Present workshops through online platforms during the wake of COVID-19 while maintaining the highest standards of professionalism.

Software Developer

September 2020 – December 2020

Carleton University Drug-Target Interaction Prediction

- Co-developed a drug-target-interaction regression model based on Extreme Gradient Boosting to predict binding affinities given protein sequences and drug SMILES representations for COVID-19 drug research.
- Improved model performance with hyperparameter tuning techniques such as cross validation and random search

EDUCATION

Bachelor of Engineering, Biomedical and Electrical Engineering

September 2016 – June 2022

Carleton University, Ottawa ON