Daniel Lee

EXPERIENCE

Pepperdata

Santa Clara, CA, USA

Backend Developer Intern, Platform & Infrastructure

May 2022 - August 2022

- Reduced average cloud installation time by over 94% by designing and implementing an internal versioning application in Java, Spark Web Framework for configuration files stored on AWS S3
- Increased efficiency of establishing **proof of concept (POC)** by leading the research and development of a serverless metrics ingestion tool to collect and ingest **100,000+ data points per day** of historical cluster metrics
- Built the tool in Java, Maven deployed to AWS Lambda, leading to a 7 day reduction in establishment time

IBM

Ottawa, ON, Canada

Backend Developer Intern
September 2021 - December 2021
• Implemented an HTTP client library used by engineering team for certificate signing requests to connect to

- microservices written in Java using Apache HttpComponents
- Rewrote shell scripts in Java to generate Apache Kafka configurations to run internally on team project
 Resolved critical logging defect neglected for over 3 months by reproducing failures and logs on CentOS

Lumenix

Toronto, ON, Canada

Software Developer Intern

January 2021 - April 2021

- Launched a minimum viable product (MVP) for 50,000+ patients by developing an analytics dashboard displaying administrative data with Python, Django, jQuery and Chart.js
- Led the design and implementation of a data pipeline using AWS DynamoDB streams and AWS Lambda triggers, leading to increased visibility through real-time event updates
- Maintained workspace by writing over 200 test cases across 3 engineers to oversee multiple release candidates

Lumenix

Toronto, ON, Canada

Software Engineer Intern

July 2020 - August 2020

- Developed a pub/sub messaging system to send events to 20+ devices written in Python using AWS IoT Core
- Improved query flexibility by redesigning AWS DynamoDB tables using a global secondary index

Projects

Simple Distributed File System

July 2022 - Present

• A distributed file system inspired by HDFS using FsImage and EditLogs to chunk, replicate and retrieve files written in **Python** using **gRPC** to create multiple volume servers to simulate a distributed environment

Pokémon Adventure

April 2021 - May 2021

• Pokémon game web app built with **React**, **Node.** is and PokéAPI utilizing **MongoDB** as a **cache** to reduce calls

Lets Chat

March 2021 - May 2021

• A chat web app built with React and Node.js utilizing web sockets, GCP Translation API and MongoDB

EDUCATION

University of Waterloo

Waterloo, ON, Canada

Bachelor of Applied Science in Mechatronics Engineering, Co-op

September 2019 - April 2024

SKILLS

Languages: Java, Python, C, JavaScript, Shell

Tools: AWS, Git, Django, Flask, Node.js, MongoDB, React

Relevant Coursework: Algorithms, Data Structures, Computer Structures & Real-time Operating Systems

Interests: Backend Web Development, Distributed Systems, Big Data, Cloud Infrastructure