

Daniel Lee

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EXPERIENCE

Pepperdata

Toronto, ON, Canada

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 **Amazon 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
- Led engineering-wide product design discussions for **over 20** engineers on adjacent teams for updates and feedback

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 monitoring platform displaying administrative data of **over 50,000** patients by designing and developing a full-stack web application with **Python, Django, jQuery** and **Chart.js**
- Led the design and implementation of a data pipeline using **Amazon 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**
- Collaborated with engineers to ensure all customer requirements for the **MVP** were fulfilled by requested deadline

Lumenix

Toronto, ON, Canada

Software Engineer Intern

July 2020 - August 2020

- Developed a publish and subscribe messaging system in **Python** to connect to **20+** IoT devices over **MQTT**
- Improved query flexibility by redesigning **NoSQL** key-value 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 video game web app where users battle and catch Pokémon to build a team developed using **React**, **Node.js**, **Express.js** and PokéAPI utilizing **MongoDB** as a **cache** to reduce API calls

Lets Chat

March 2021 - May 2021

- A chat web app where users are matched in rooms and conversations are translated in real-time built using **React**, **Node.js** and **Express.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