

# Nicholaus Suprpto

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## Education

### University of Waterloo

2020–2025

Candidate for Bachelor of Computer Science, Data Science Major

Relevant Coursework: Data Structures, Database Management, Algorithms, Operating Systems, Data Analysis

## Skills

**Programming** Python, C++, C, NodeJS, Java, Golang, Bash, SQL, R

**Tech Stack:** AWS, Git, Docker, Pandas, Vue, Svelte, Jest, Django, PostgreSQL, MySQL, Firebase

## Experience

### State Street Corporation

Toronto, ON

Cloud Engineer Intern - Infrastructure Team

Jan 2023 - April 2023

- Developed a monitoring dashboard in OpenSearch to monitor indices transitions across all clusters
- Designed and implemented a pipeline for AWS Transit Gateway logs from S3 Storage to OpenSearch
- Separated existing CloudWatch logs pipeline into different streams to reduce data flow
- Improved the efficiency of the pipelines and reduced average processing time by 10%
- Implemented AWS SQS to manage the flow of data in the pipelines to prevent throttling

### FarmLink Marketing Solutions

Winnipeg, MB – Remote

Software Developer Intern - Fullstack Development Team

May 2022 - Aug 2022

- Developed user interfaces using Vuetify in client-facing web application while practicing pair programming
- Effectively refactored front-end components into generic components to reduce code complexity
- Configured Vite and front-end code splitting that reduces load times by 26% and reduces bundle size by 72%
- Optimized Django ORM queries of 3 main features to reduce API response times to a standardized response time

### Paramount Commerce

Toronto, ON – Remote

Merchant Integrations Analyst Intern - Merchant Success Team

Sept 2021 - Dec 2021

- Certified merchant integrations with the organization's payment services to meet compliance requirements
- Utilized SQL queries to gather transaction data and extract information for merchant integrations
- Assisted the company-wide Salesforce migration from Jira and created new Reports and Dashboards in Salesforce

## Projects

### Recipe Recommendation App 📱

- Built a functional web application that utilizes Svelte to provide recipe recommendation based on user's ingredients
- Created a backend API using Golang to interact with PostgreSQL database, ensuring efficient data management

### Spotify Data Visualization 📱

- Designed rich data visualization to model personal Spotify streaming habits with Matplotlib and Seaborn
- Collected historical data and audio analysis data from Spotify API and worked on data cleaning and ensured data consistency using Pandas and Numpy

### Binary Image Classifier 📱

- Built binary image classification model based on EfficientNetB3 to classify images into two distinct groups during week-long hackathon event, CxC Summit hosted by UW CSC and UW DSC
- Increased dataset by data augmentation and fine-tuned the model with manual tuning to reach 93% accuracy

### WLP4 Compiler 📱

- Built a compiler for WLP4, a strict subset of the C++ language, that produces ARM code of the given file with some optimization such as constant folding.
- Implemented Simplified Maximal Munch scanning algorithm and Bottom Up parsing algorithm