# **Hansson Lin**

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#### Skills

Languages

Java, C++, C, JavaScript, Python, SQL, HTML, CSS

Frameworks

Spring, Node.js, React, Angular, JUnit, RobotFramework, Selenium

Tech & Tools

MongoDB, PostgreSQL, AWS Lambda, API Gateway, DocumentDB, Git, Gradle, Maven, Postman

### **Experience**

### **Ford Autonomous Vehicles** — Cloud Computed Autonomous Driving Solutions

Remote

Sept 2020 - Current

Software Engineer Intern

- Worked on Vehicle Mode Management; handles mode change requests/responses asynchronously for AV Cloud Platform
- Engineereed security validation service using AWS Lambda, API Gateway, and MongoDB, to block fraudulent requests and cut business overhead costs
- Designed multi-tenancy architecture for all security services, enabling thread safe handling for concurrent API requests
- Ensured unit, integration, and functional test coverage for all security services using JUnit, Cucumber, Robot and Selenium
- Currently designing **machine learning algorithm**, trained with user tendency history, to dynamically adapt criteria for fraudulent request detection

### **PointClickCare** — Cloud-Based Healthcare Software

Toronto, ON Jan 2020 – April 2020

Software Engineer Intern

- Worked on cloud-platform's Financial Management module; tasked with billing and payments
- Created new transaction type End-End feature for cash app, providing 1.4+ million active clients a new channel for billing
- Integrated platform-wide support for new transaction type with Microsoft SQL Server and Spring, enabling crosscompatibility for Financial Management operations on ~100 million yearly transactions

## **Inetco Systems** — Real-Time Transaction Monitoring and Analytics

Burnaby, BC May 2019 – August 2019

Full Stack Developer Intern

- Worked on Insight, a software platform to monitor transactions in real-time; used Angular, RxJS and Nvd3
- Built new type-enforced JSON-to-Object mapper library for transactions data handlers, decreasing page load times by 30%
- Designed a new transaction data model schema, increasing data process speed from 50+ API request endpoints

### **Projects**

### Simpli-Fly — Python, C, Arduino, Leap Motion 🤉

devpost.com/software/simpli-fly

Hack The North 2018 Winner

- A program that enables a drone to be flown using hand movement and gestures
- Used Leap Motion controller to monitor hand motion which is then used to generate velocity and position vectors
- Developed algorithm to map vectors to scaled pitch, roll, and throttle values within drones' movement capabilties
- Transmitted movement instructions synchronously from PC running Python to on-board Arduino through Bluetooth
- Won Canadian Special Operations Forces Command 1st-place prize at Hack The North 2018

### **Education**

### **University of Waterloo • Software Engineering**