

- Recent **Computer Security** graduate with over three years of experience in developing **REST APIs** using **Java** and **Spring Boot**
- Enthusiastic about and experienced in **software architecture**, **DevOps**, application security, authentication, cryptography
  - Co-founder** of Tread2Go ([tread2go.com](https://tread2go.com))

## Skills & Concepts

<b>Security</b>	Cryptography, Authentication, JWT, <b>Spring Security</b> , Network Security, <b>SSL</b> , <b>OAuth2</b>
<b>Languages</b>	<b>Java</b> , TypeScript, PHP, JavaScript, <b>SQL</b> , Python, Eiffel, C, C++, SCSS, HTML, CSS
<b>Frameworks</b>	<b>Spring MVC</b> , <b>Spring Boot</b> , Symphony, Angular, <b>RabbitMQ</b> , jQuery (lib)
<b>DevOps</b>	Amplify, <b>Maven</b> , <b>Docker</b> , Kubernetes, <b>Jenkins</b>
<b>AWS</b>	Amplify, <b>Cognito</b> , <b>BeansTalk</b> , <b>S3</b> , <b>EC2</b> , <b>ECS</b> , <b>RDS</b> , <b>SES</b> , <b>Route 53</b>
<b>Other</b>	<b>REST API</b> , <b>Microservices</b> , <b>Linux</b> , <b>Software Architecture</b> , Multithreading, Synchronization, PWA, Algorithm Optimization

## Education

### B.Sc. Spec. Hons. Computer Security

Sep. 2015 - Apr. 2020

YORK UNIVERSITY

North York, Ontario, CA

- Member of **Dean's Honour Roll** (GPA of **7.38 out of 9**)
- Achieved **Chair's Honour Roll** in Mathematics and Statistics

Sep. 2015 - Apr. 2016

## Work Experience

### Computer Security Research Assistance

Jan. 2020 - Current

YORK UNIVERSITY

North York, Ontario, CA

- Malwareless Web Analytics Pollution Tools Analysis and Development
  - Overall feasibility and effectiveness of conducting successful attacks evaluated.
  - New **multithreaded MWAP attack tool** developed ([github.com/saaniaki/eloki](https://github.com/saaniaki/eloki)) in **Java** and **Maven** using HtmlUnit and Selenium to precisely assess **Google Analytics** and **AWStats** vulnerability to fake requests and successfully manipulate analytical data.
  - Developed feature to bypass known bot-detecting tools (**Google reCAPTCHA v3**).

### Co-founder & CTO

Jun. 2019 - Jun. 2020

TREAD2GO INC.

Richmond Hill, Ontario, CA

- Architected** and developed mini ERP **RESTful API** using **Spring Boot**, **Spring Cloud** and deployed on **AWS** Beanstalk.
  - Significantly **minimized costs** by automatically scheduling orders, managing resources and optimizing operations.
  - Highly scalable** and convertible to **microservices**.
  - Integrated and used various third-party APIs to make the development process faster (Firebase, Google Cloud APIs, Nexmo, Stripe and more).
  - Applied best practices and design patterns to develop **RBAC** using **Spring Security**.
- Initiated Tread2Go Angular PWA and managed Angular front-end team using Trello, GitHub and Swagger; improved **interpersonal skills** to lead the project and **soft skills** to manage the stressful environment.
  - Repetitively converted business requirements to practical development plans, **managed and executed development plans** using the defined **budget**, enabled the company to continue working with **lean** and **agile** strategy.
- Deployed and maintained PWA and server-side services, orchestrated DNS, Security Policies, S3, EC2, Beanstalk, RDS and SES.
  - Applied and setup **DevOps** using Amplify and GitHub to **ease PWA delivery** significantly.

### Information Security Analyst

Jan. 2019 - Apr. 2019

SCOTIABANK

Scarborough, Ontario, CA

- Developed a robust cryptography tool** in Java **without any framework** to include the least number of external libraries (security requirement).
  - Compatible with **OpenSSL** standards, leverages from both **Symmetric and Asymmetric cryptography** and **digitally signs** documents.
- Analyzed application security (SAST & DAST) using Micro Focus Fortify, WebInspect and Blackduck.
- Integrated new security analysis and management software using Python to make analyzing static source code vulnerabilities **more efficient**.
  - Utilized Jira, Bitbucket and **Jenkins** to improve application delivery process.

### Full Stack Developer

Jul. 2018 - Sep. 2018

CUBEANGLE INC.

Markham, Ontario, CA

- Architected** and developed Trade Dimension Dashboard using Angular and **Spring Boot** framework (**REST API**).
  - A **Cloud-based** web application to visualize trade data stored on **AWS** Redshift.
- Utilized cloud computing concepts and various **AWS** tools for deployment (**Cognito**, RDS, API Gateway, **Ubuntu** EC2, Amplify).

### Web Application Developer

Apr. 2017 - May. 2018

VASTER INC.

North York, Ontario, CA

- Developed Vaster Dashboard using Angular and Symphony (**REST API**) to visualize data and support CRUD operations, deployed on **CentOS** EC2.
- Architected** and developed **Cloud-based** API of Novo Chat by adapting **Spring Boot**, **Spring Cloud** and **Docker**.
  - Implemented Discovery Service, Default Gateway, Configuration server and other **microservices**, deployed on multiple **Ubuntu** EC2 instances.
- Applied best security practices for authentication and **microservices** secure communication (JWT).