

# Alex Rosen

Computer Science student at the University of Toronto

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## EXPERIENCE

### GetOppos, Toronto — *Software Engineer (Internship)*

May 2022 - August 2022

At GetOppos I developed oppossecure.com, which acts as the interface for users to purchase, order and use “BCON” devices. These devices are network-attached systems set up as a decoy to lure hackers and discover unauthorized access to information systems. Below is a list of some tasks I accomplished to build the site:

- Designed a state-of-the-art production server and database for a Django project using PostgreSQL, Nginx, Gunicorn, and Unix sockets on Ubuntu 20.04.4 (with an SSL certificate)
- Built a custom shipping manifest for efficient product fulfillment
- Created an in-house subscription system that takes Credit, Debit, and Google Pay using Stripe as a payment gateway (included promotional code system and automatic charges without storing sensitive card information)
- Implemented an SMTP email alert system.
- Created an authentication system with typical features, for example, a password reset system by email
- Built secure API and Webhook HTTPS endpoints
- Added sharing capabilities for user interaction
- Designed a full-text search system that takes in various parameters to quickly search through thousands of logs/alerts

### Snacker — *Founder/Developer*

June 2021 - August 2021

Snacker is a real-time food truck locator app (Android and iOS). Building this app allowed me to gain enough experience and confidence to work as a full-stack developer.

## LANGUAGES

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

I'm comfortable picking up new languages/frameworks

## EDUCATION

### **University of Toronto** — *B.Sc in Computer Science*

September 2022 - April 2026 or 2027

### **The York School** — *IB Diploma*

September 2020 - May 2022

## PROJECTS (can be seen on my GitHub @alexrosen45)

### **Pricing Bitcoin Options**

Pricing european-style Bitcoin call options with a modified version of the Black-Scholes model.

### **Snacker**

A real-time food truck locator app where trucks can update their locations on a map with just one click of a button.

### **Dogebot** — *Trading Bot*

Dogebot is a trading bot that measures the price movements of Dogecoin after Elon Musk tweets about it.

### **AES 128**

A pure-Python implementation of AES-128 to encrypt text files.

### **Personal Website version 2** — <https://arpersonalwebsite.com/>

For displaying my projects and contact information.

### **COVID-19 Information App**

An app that displays data using API's from Johns Hopkins and the World Health Organization on relevant COVID-19 statistics for your area. It also has information sections on FDA-approved vaccines and the latest local or global COVID-19 news stories from trusted sources. This project was built in Java using Android Studio.