## Christopher Chmielewski

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## Objective

I am currently specializing into the cybersecurity field. I have a software development and systems engineering background. Currently I am exploring cybersecurity concepts that interest me such as DDoS tools and worms while I pursue a postgraduate certificate in Cybersecurity from George Brown College.

## **Skills**

Languages: Bash, Go, JavaScript, Rust, Scheme

Computer Technology: Linux, TCP/IP, HTTPS

Methodologies: Lean process improvement, statistical process control, designed experiments, engineering

design process

Soft Skills: Communication skills (written and verbal), reliable, punctual, diligent

Languages: Fluent English and proficient Polish

# **Professional Experience**

#### Security Guard - Cadillac Fairview Corporation Limited - Toronto, ON

07/2024 - Present

In-house security at Fairview Mall, a moderate incident location.

- · Policy enforcement, incident response and reporting, maintaining order, theft deterrence, first aid
- Customer service in guiding and assisting patrons in the mall, and in resolving patron-tenant disputes
- Built a QR code scanner key control log as a Google Workspace web app in JavaScript, HTML, and CSS

### Software Developer - KPMG LLP. - Toronto, ON

09/2021 - 07/2024

Development and maintenance of a full-stack web application and Excel/VBA desktop applications to automate Canadian and United States tax filings.

- Applied customer service skills with clients to understand requirements and to troubleshoot issues
- Implemented a formal software development methodology through consensus-building and teamwork
- Documented development workflows, software architectures, and data processing algorithms
- Utilized a Vue.js, Node.js, MS SQL Server web stack and Excel/VBA/PowerQuery

### Software Developer - Newmatter Software Inc. - Regina, SK

09/2020 - 01/2022

Developed an inventory management web application for a municipal client.

- Inventory management system built with React.js, Node.js, PostgreSQL
- Built purchase order tracking application in Excel/VBA
- Worked with the municipal client directly to determine requirements and design the application
- Developed and delivered the inventory management system and purchase order tracking application ontime and on-budget

#### Manufacturing Engineer – Brandt Industries Ltd. - Regina, SK

02/2017- 08/2021

Designed and implemented processes, procedures, metrics, reports, and software to support manufacturing and material handling operations.

- Designed and developed a warehouse receiving and material handling desktop application in Excel/VBA that monitored facility logistics in real time, resulting in a 90% reduction in dock-to-stock times
- Executed a designed experiment on trailer paint line to identify potential cost savings as part of a trial that result in the adoption of electrostatic paint system with paint material savings of 30% per trailer
- Performed a designed experiment comparing MIG welder fume extraction systems resulting in the adoption of weld torch fume extractors reducing weld porosity

### **Education and Certificates**

### Cyber Security, Postgraduate Certificate

George Brown College - Toronto, ON

First Aid & CPR/AED Level C - 105082884 - Expiry Date: 2027-05-24

2024

### Industrial Systems Engineering, Bachelor of Applied Science

University of Regina - Regina, SK

2011 – 2016

09/2024 - 08/2025

#### Lean Greenbelt Certificate

2018

Lean Sensei/Canadian Manufacturers and Exporters - Regina, SK

## **Projects**

#### DDoS Photon Cannon - Git Repo - Blog Post

2024

DDoS Photon Cannon is a DDoS tool composed of two parts; a command and control server and a bot program. This project and the accompanying exploitation of an improperly configured Apache HTTP server demostrate DDoS tool software development, target infiltration, bot deployment, and bot command and control to execute a DDoS attack.

#### Cryptographic Network Service (CNS) - Git Repo

2024

CNS is a key vault implemented as a network service. Used to securely store cryptographic keys and to securely execute cryptographic operations with those keys.

- REST API designed for use with network services and web applications
- Built with Go using only 3 dependencies outside the Go standard library for increased software supply chain security
- Backed by PostgreSQL database
- Vendored dependencies for tighter control on critical dependencies
- Features:
  - Password hashing using the argon2id hashing algorithm
  - Signing and verifying JSON web tokens (JWTs) using HS256
  - Multiple clients (i.e. users of the keys in the key vault) with one or more keys
  - An administration command line interface (CLI) for key management tasks
- Full unit and integration test coverage
- Fully <u>documented</u> system design and security threat model

# **Training Exercises and Events**

#### Splunk BOTS - Cyber Security Operations Center CTF Event - Blog Post

November 2024

- Particapted in a blue team capture the flag (CTF) event hosted by Splunk and Cyber Security Ontario
- Worked in a team of four to query and analyze log data from AWS CloudWatch, AWS CloudTrail, AWS
  EKS, web servers, Slack, and other sources looking for signs of attacker infiltration and data compromise
- Placed 5th out of 18 teams

#### Code Silver – Active Attacker Full Mock Exercise – Fairview Mall

September 2024

- Particapted as part of the Fairview Mall security medical strike team along with Toronto Fire Services (TFS) and Toronto Police Services (TPS)
- The exercise involved two scenarios; an active stabber and an active shooter scenario
- Provide first aid to mock stabbing and gunshot victims in a full mock exercise
- Triaged patients, applied first aid, and transfered patients from first aid to TFS and TPS as they arrived