

EDUCATION

Athabasca University

Bachelor of Science, Computing and Information Systems

Correspondence

2016 - Present

University of Calgary

Bachelor of Science, Computer Science

Calgary, Alberta

2014 - 2016

EXPERIENCE

Shopify

Internal Security Developer

Ottawa, Ontario

June 2018 - Present

- **Development:** Developed a Ruby on Rails application to handle authentication and authorization of internal systems. Running in-line for all requests handling upwards of 100 000 requests per minute, with a p99 response time of 10ms.
- **Mentoring & People Leadership:** Developed interns through both the regular intern stream, as well as part of [Shopify's Dev Degree program](#).
- **Technical Leadership:** Subject matter expert for internal and external authentication and authorization systems, led authorization team for the onboarding of regulated industries onto Shopify's platform.
- **Zero Trust:** Developed internal system to support a zero-trust security system for thousands of employees across dozens of countries.

Internal Security Analyst

October 2017 - May 2018

- **Development:** Developed transparency application for employees to understand the data collected by Shopify's enterprise device management solution.
- **Device Security:** Led Device Security initiative to standardize threat models for employee devices and created device tiering model to support BYOD program.
- **Identity Security:** Overhauled an internal meta-identity management system that supported applications for which we did not have SSO support for (e.g. GitHub).

Telus

Security Analyst II

Calgary, Alberta

January 2017 - Sep 2017

- **Development:** Developed automation systems for incident response, including a machine learning system for classifying and responding to internally-targeted phishing campaigns.
- **Malware Reverse Engineering:** Reverse engineered malware targeted at Telus employees to determine capabilities, source, and target.

Security Analyst I

June 2015 - December 2016

- **Incident Response:** Responded to and managed incidents relating to internal systems.

PROJECTS

All projects can be viewed at <https://www.nicktaylor.ca/projects>.

- **Sorting Algorithm Visualization:** A visualization tool for different sorting algorithms.
- **Stackless EVEmu:** A partial rewrite of the [EVEmu EVE Online server](#) written in Stackless Python, and based on reverse engineering of the EVE Online client.
- **Trawler:** A simple Python Flask application to help ingest and manage phishing reports for SOC teams.

PUBLICATIONS

Making Technical Decisions

Shopify Summit

Ottawa, Ontario

2019

Automating Malware Analysis

BSides Calgary

Calgary, Alberta

2017

Reverse Engineering MMOs for Questionable Fun and No Profit

c0wsec

Calgary, Alberta

2017