

Daniel Kozlovsky

Software Engineering graduate | Internship experience | Skilled in software development and design | Passion for computer security

Employment

Cyber Threat Intelligence Analyst

May 2020 – Sept 2020

BMO Financial Group – Toronto, Canada

- Researched current and strategic cyber threats to the company and industry, writing 5-7 formal reports per week
- Used research, analytical skills and security knowledge to assess cyber threats to the company, with the help of tools like FireEye and Intel471
- Presented cyber threat reports company-wide, to stakeholders, senior and executive management in both briefing and feature presentation scenarios
- Contributed hundreds of IoCs per week while working closely with SOC teams to assess vulnerabilities and company exposure

Software Developer

Mar 2019 – Sept 2019

BMO Financial Group – Toronto, Canada

- Maintained critical, bank-wide reporting application for entire bank's SWIFT wire system responsible for billions of dollars per day
- Also maintained internal reporting application, written in Java and Shell, following strict testing and deployment guidelines
- Discovered 30+ bugs/issues through JUnit and PowerMockito testing with legacy code, prompting a maintenance release
- Practiced DevOps principles when deploying updates in CI/CD environment with tools like Git, Ansible, Bamboo, and Artifactory
- Followed RBAC security principles while setting up and managing users and groups in critical money transfer application

Quality Assurance Analyst

Sept 2018 – Mar 2019

BMO Financial Group – Toronto, Canada

- Wrote and executed hundreds of test cases as part of regression, user and integration testing
- Exceeded expectations and was promoted to Software Developer with contract extension
- Saved weeks of time for colleagues by automating tedious/repetitive tasks through various macros, selenium and VBA scripts
- Discovered many hidden security issues with a third-party application, through extra, manual penetration testing with SQL injection and XSS

Education

B.Eng., Spec. Hons. Software Engineering (Security)

June 2021

York University, Toronto, Canada

- **Key Coursework:** Data structures, algorithms, OOP, web development, networking, embedded systems, operating systems, e-commerce, mission-critical systems, software engineering (requirements, design, testing), computer security, network security & forensics, cryptography

Projects

Virtual Reality Showroom

- Desktop, virtual reality application for showcasing thousands of tiles without visiting a studio, made with Unity
- Worked with Unity Game Engine and SteamVR to allow player to walk around a high fidelity house and apply tile textures to walls and floors
- High graphical fidelity and performance with 4k textures and comprehensive post-processing, achieved through Unity and substance alchemist

- Led a team through the SDLC and managed tasks, issues, documentation throughout all phases from requirements to testing and deployment

Malware Family Research Paper

- Dissection of the DroidKungFu Android malware family to identify common indicators and patterns
- Sandboxed and decompiled binaries for analysis in Kali Linux and linked TTPs to MITRE ATT&CK
- Applied research and analysis techniques to outline findings in a scientific report that spawned key discoveries like faked certificates, modularity and Trojan hiding techniques

Shopping Website

- Website for a mock store that provides means of online shopping
- User-friendly, aesthetic and intuitive interface created with Vue.js and HTML/CSS
- Followed formal DevOps procedures to deploy the application, from Dockerizing to hosting on AWS
- Secured backend through TLS, bearer tokens, password hashing with AWS Cognito to protect users and their data
- Team collaboration, task management and version control through Github

Online Bookstore

- Developed an e-commerce web-app that allows managing cart, creating accounts, and leaving book reviews
- Consists of a servlet based backend with AJAX and JDBC to deliver a dynamic and secure user interface
- Includes API for querying books and past orders
- Deployed on IBM cloud with a cloud database to store accounts and books

Skills

- **Proficient:** Java, J2EE (JUnit, JPA, JDBC, JSP, Servlets, Maven), C#, Git
- **Intermediate:** C/C++, Unix, HTML/CSS, JavaScript, React.js, Vue.js, SQL, PHP, PowerShell, Kali Linux, Docker, Firebase, IBM Cloud, Unity, SteamVR