

# Anushka Khare

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[GitHub](#) | [LinkedIn](#) | [Portfolio Website](#)

## Work Experience

### Iron Spear, Calgary - Cyber Security Student

May 2022 – Aug 2022

- Helped clients mitigate high-risk host vulnerabilities using Rapid7's InsightVM scanner results.
- Performed malware analysis to build IOCs (indicators of compromise) to enable detection.
- Presented weekly reports to the client senior management.
- Developed cybersecurity controls, standards, and policies based on NIST V1.1 and ISO 27002, including maturity ratings, data classification, and incident response plans.
- Built HTML templates for phishing campaigns and implemented AWS SES and Route 53 services to create phishing domains and sending profiles.
- Conducted internal and external network vulnerability scanning and reporting with QualysGuard and assisted clients with mitigating the identified threats by developing vulnerability assessment reports.
- Conducted threat and risk assessments for software solutions.
- Integrated an open-source incident response system and security operation control (SOC) using TheHive and Cortex.
- Developed Python scripts to generate alerts within the Incident Response System and trigger alerts in SOC

### BlackBerry, Waterloo – Cyber Security Architecture Student

Jan 2022 – April 2022

- Analyzed AWS Security Hub findings and SIEM logs using ArcSight to identify remediation actions.
- Created JIRA project, Scrum board, Confluence page for project updates.
- Communicated with vendors to resolve problems for Elastic Container Registry Integration.
- Conducted Security Risk Assessments and Threat Risk Assessments for BlackBerry Products.

### Trans Mountain, Calgary – Cyber Security Analyst, Intern

May 2021 – Jan 2022

- Formalized governance standards in alignment to control sets NIST, ICFR and Z246.21-1
- Collaborated with Security Operations Center Monitoring to monitor risky logins, mass deletions, suspicious activity on SCADA side by using Forescout, and analyzing phishing emails.

## Projects

### 2022 User Authentication System

Ruby, SQLite3

- Developed user authentication tool using Ruby on Rail 6 by creating a database of unique users in SQLite3 and by running migrations to ensure proper access control.
- Configured controllers to create, manage and authenticate users and enabled password reset through email.

### 2022 Credit Card Encryptor

Java, Cryptography

- Built an asymmetric encryptor that can generate, store, and use RSA 2048-bit keys in Java.
- Used the encryptor to encrypt and decrypt data and ensured PCI DSS Compliance.

### 2022 Creating a SIEM

Elasticsearch, Kibana, Suricata

- Deployed Suricata servers to scan the network for suspicious events and Filebeat to parse and send events to Elasticsearch. Used Elasticsearch to store and correlate security events.
- Implemented alerts, rules, and exception cases in Elasticsearch and visualized the data with Kibana.

### 2021 Network Probe Transmission with MAC Address Randomization

Bash Scripting

- Researched and implemented wireless propagations strategies and IEEE 802.11 protocols.
- Designed an experiment project to analyze probe transmissions using Wireshark and identified different devices that are using MAC address randomization to increase network security.

## Education

### University of Alberta

B.Sc. In Computer Engineering  
Class of 2024  
GPA – 3.6/4.0

### Achievements

- ★ William Muir Edwards Award 2022
- ★ ESET Women in Cybersecurity 2022
- ★ Hero Training Scholarship 2022
- ★ Govt of Alberta Women in STEM 2022
- ★ University of Alberta President's Citation Scholarship for Academic excellence – 2019, 2020, and 2021

### Certifications

AWS Certified Cloud Practitioner

### Competitions

Won first place out of 20 teams in cybersecurity case competition sponsored by Google

## Skills

### Programming Languages

Python, C++ Java, SQL, Ruby, HTML, CSS, JavaScript, TypeScript

### Tools, and Libraries

AWS: Route 53, SES, EC2, S3

Kali Linux, Ettercap, Metasploit, Nmap, John the Ripper, Pwntools, PyCrypto, Wireshark, BurpSuite, Jad Debugger

React, SQLite, Eclipse, MongoDB, TheHive

### Other Activities

CTO of eevee Technologies Inc. – peer2peer equipment rental start-up.

Co-VP Academic Engineering Student Society at University of Alberta – 2022-23

Co-VP External Computer Engineering Club – 2022-23