

Jasraj Singh Johal

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Experience

Software Engineering Intern - Cybersecurity

North York, ON

American Express

May 2024 – Aug 2024

- Designed and developed security-focused training modules using **React** to educate developers on **secure coding practices**, resulting in a 30% reduction in security vulnerabilities in applications.
- Created a simulated API environment to demonstrate **OWASP Top 10** security threats, enhancing awareness and hands-on understanding among development teams.
- Automated repetitive security analysis tasks with **Python** and **Bash** reducing manual workload by 80%.

Software Engineer

Riipen - Radiology Artificial Intelligence Network

Nov 2023 – Jan 2024

- Improved hospital application usability by implementing advanced filtering functionality with Django and React, leading to a 25% increase in user engagement.
 - Collaborated with cybersecurity teams to develop comprehensive cybersecurity reports, identifying potential vulnerabilities and recommending mitigations to strengthen system defenses.
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Education

Bachelor of Applied Science, Computer Science COOP

Sept 2022 – Expected May 2026

McMaster University, Hamilton, CA

Relevant Coursework: Computer Security, Data Structures & Algorithms, Operating Systems, Computer Networks and Security, Software Development

[Diploma in Cyber Security](#)

May 2023 – Aug 2023

LightHouseLabs / McMaster University

Gained hands-on expertise in cybersecurity, including blue team operations, compliance reporting, vulnerability assessment, encryption protocols, and practical experience with **forensic tools** such as **memory analysis**, **file system forensics**, and **network analysis**

Leadership & Activities

McMaster University Clubs

VP Cybersecurity – McMaster Competitive Programming Club

Sept 2024 - Present

- Leading CTF logistics and cybersecurity initiatives, boosting member engagement in ethical hacking.

Workshop Developer – McMaster Artificial Intelligence Society

Sept 2024 - Present

- Facilitating workshops for 50+ participants, delivering insights into AI theory, and enhancing understanding through hands-on model building.

CryptX High School Club, India

Founder / Head of IT Department

Apr 2020 - Sept 2022

- Led a cybersecurity and technology club, educating **200+ students** on ethical hacking and data security, fostering a **95% increase** in STEM interest.

Achievements

- Ranked 14th out of 170 teams in the 1st Annual TCM CTF 2023 by MetaCTF.
 - Secured a top 14 spot out of 50 teams at the Canada Regionals – **CyberSci Regionals CTF 2023**.
 - Certifications: Pursuing **CompTIA Security+**.
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Skills

Programming Languages: JavaScript, Java, C/C++, Python, SQL, R, Bash

Cybersecurity: Vulnerability Assessment, Threat Detection, Encryption Protocols, Incident Response, SIEM, Firewalls, IDS/IPS

Frameworks & Tools: Node.js, Express.js, RESTful APIs, Django, React, Git

Database Management: SQL, PostgresDB

Soft Skills: Problem-Solving, Adaptability, Communication, Leadership