




Manan Kharwar

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EDUCATION

McMaster University

Hamilton, ON, Canada

BEng in Engineering Physics (Minor: Computer Science)

Sep 2019 - June 2024

- Engineering Int'l Honors Award Recipient
- Relevant Courses: Data Structures & Algorithms, Object Oriented Programming, Programming Controllers
- Clubs & Teams: President @student's club, Mac Formula Electric, McMaster Rocketry, Co-op Ambassador

SKILLS & INTERESTS

Languages/Frameworks: Java, Python, Bash, JavaScript, TypeScript, Next.js React, Kubernetes

DevTools: Git, Docker, CI/CD, Jenkins, Angular, OpenShift, Algorand, MaterialUI, Plotly.js, JIRA

WORK EXPERIENCE

Test Automation Co-op

Toronto, ON, Canada

Ceridian HCM

May 2023 – August 2023

- Created 500+ automated test cases with 90% overall test coverage, reducing production bugs by 50%
- Dealt with the false positives that came up with automated testing, ensuring the test suite remained up to date

DevTestSecOps Developer Co-op

Toronto, ON, Canada

Intact Insurance Corporation

May 2022 – April 2023

- Optimized dashboard performance by 50%, cutting data visualization loading time from 10 to 5 seconds
- Reduced the number of critical security vulnerabilities by 60% through continuous code analysis and remediation
- Deployed 20+ microservices across multiple environments with 99.9% uptime and 40% faster mean time to recovery
- Built with Next.js React framework using Material-UI, Plotly.js components, served with Express, & TypeScript

Network Engineer Co-op

Mississauga, ON, Canada

Bell Canada

May 2021 – August 2021

- Saved the company over 250 man-hours per year by architecting a new test to automate database xml workflows
- Produced a comprehensive ESG integration report for 100+ client portfolios, with actionable improvements

Augmented Reality Software Developer Co-op

Hamilton, ON, Canada

Pulse Lifesaving

May 2020 – August 2020

- Experimented with Microsoft HoloLens 2 to bring holographic lifesaving courses to reality
- Led in the design, development, and implementation of 25+ graphics, layouts, & production materials

EXTRACURRICULARS

Decentralized Algorand Payroll (Overall 3rd prize)

Menlo Park, California, USA

Robinhood – Hackathon for Social Good

June 2022 – Sep 2022

- Developed and deployed an android application using the Algorand's blockchain atomic transfer and smart contracts
- Generated unsigned transactions and added node to blockchain using Algorand's Sandbox & Node.js in real-time

Ground Controls Software Specialist

Hamilton, ON, Canada

McMaster Rocketry

August 2021 – August 2022

- Built a real-time rocket management software by wireless communication using Java
- Focused on multiple aspects of ground controls including post flight data visualization & rocket testing