

# Mayank Madan

(+1) 782 882 3216 | madanmayank5@gmail.com | Canada

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

## SKILLS

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**Frontend:** JavaScript, Typescript, Angular, ReactJS, HTML, CSS, SCSS, Bootstrap

**Backend:** Java, Python, Spring Boot, NodeJS, JUnit, GraphQL

**Database:** MySQL, PostgreSQL, MongoDB

**DevOps:** Docker, Kubernetes, Azure DevOps, AWS Serverless, Continuous Integration Continuous Development(CICD)

**Soft:** Problem-Solving, Adaptability, Critical Thinking, Teamwork, Collaboration, Mentoring, Effective Communications

**Misc.:** Linux, Git, Agile, Progressive Web Apps(PWAs), IDE Extension Development, Test Driven Development(TDD).

## EXPERIENCE

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### Senior Product Engineer, Intelligent Service Network, Tata Consultancy Services

June 2019 – Nov 2022

- Boosted user engagement by 25% through real-time, device-native notifications and offline experiences.
- Elevated team's development efficiency by 40% via language server for an internal, high-level language, integrated into VsCode IDE, resulting in a faster, error-free experience.
- Achieved 27% inter-microservice communication efficiency boost by migrating legacy APIs to GraphQL.
- Improved internal UI framework visualization capabilities by 20% with custom widgets and utilities.

## INTERNSHIPS

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### Software Developer, Dispension Industries

Jan 2024 – Apr 2024

- Revamped codebase by abstracting kiosk-independent processes, slashing deployable size by 20%.
- Substituted 3<sup>rd</sup> party integrations like dashboards with native implementations to reduce operation costs.
- Optimized over-the-air kiosk software patching and upgrades, accelerating time to market.

### Mitacs Accelerate research intern, Lab2Market

Aug 2023 – Dec 2023

- Analysed open-source code assessment tools like PMD, Checkmarx within a sandbox environment to assess their effectiveness across varying software development intensities.
- Performed 50+ customer discovery interviews with professionals to pinpoint gaps in quality assurance.

### Teaching Assistant and Marker, Dalhousie University

Aug 2023 – May 2024

- Supervising, instructing and assessing 150+ graduate students in Advanced Software Development course.

## PROJECTS

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### Coder Gate – Code Quality Bot for GitHub ([GitHub Link](#))

- Engineered a tailored GitHub action for automated in-depth static code analysis of repository code changes.
- Architected automated Pull Request resolution, enabling configurable actions based on predefined metrics.
- Generated and visualized actionable insights tailored to repositories and contributors by analyzing trends.

### Trivia Titans – Multiplayer Trivia Game ([GitHub Link](#))

- Established an email-based invite-only game lobby with a waiting room feature to manage secure access.
- Spearheaded UI development and module integration for the cloud-native serverless application on AWS.

### Newsly – Personalized Newsletter service ([GitHub Link](#))

- Developed a newsletter broadcast pipeline using user-subscribed SNS topics, linked to specific S3 buckets.
- Automated scheduled broadcasts from an SQS backlog to newsletter subscribers using EventBridge.

## EDUCATION

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### Dalhousie University

Jan 2023 – Apr 2024

**Masters of Applied Computer Science: 4.19/4.3**

**Modules:** Advanced Cloud Computing and Architecture, Serverless Data Processing, Blockchain, User Experience and Entrepreneurship.

### The NorthCap University

Jul 2015 – Apr 2019

**Bachelor of Technology in Computer Science: 8.04/10**

**Modules:** Data Structure and Algorithms, Secure Coding practices, Web Programming, Artificial intelligence and Object Oriented Programming(OOP).