# Francis Ayyad

□ francis.ayyad@mail.utoronto.ca — □ ePortfolio — □ francisayyad — □ francisayyad → □ francisayyad03

# **Skills**

Languages JavaScript | TypeScript | Java | Python | HTML | CSS | C | R | Haskell | PHP | Assembly

Database MongoDB | PostgreSQL | MySQL | Firebase | Django | Docker | Linux | UML

Frameworks React | Node.js | Express | jQuery | Laravel | Android Studio | NumPy

Coursework Software Engineering | Operating Systems | Computer Graphics | Machine Learning

# **Experience**

#### DevOps Engineer | RMC Canada (Startup)

Nov 2024 - present

- Designed and deployed the startup's website from scratch using a scalable MVC architecture with Node.js,
   Express.js, and Django, achieving 99.9% uptime and 25% faster load times.
- Designed detailed deployment diagrams and C4 diagrams to ensure smooth deployment and efficient collaboration across the team, streamlining development and deployment workflows.
- Collaborated in a team of 4 to build a scalable, user-friendly platform, meeting tight deadlines and ensuring successful
  delivery and deployment.

# Web Developer | University of Toronto

Apr 2024 - Aug 2024

- Transferred educational web content from H5P modules to Drupal, enhancing functionality, scalability, and optimized navigation, resulting in a 20% increase in website traffic and 15% faster load times.
- Collaborated with a multidisciplinary team of 5, including tech leads, product managers, devlopers, and UI/UX designers, in conceptualizing and crafting engaging web content and layouts, resulting in a 15% improvement in productivity by streamlining the content creation and review process.

# **Software Developer | University of Toronto**

Jan 2023 - Aug 2023

- Identified processing inefficiencies on the Teacher Assistant Application website and leveraged Laravel, MySQL, PHP,
   HTML, and JavaScript to implement a batch application feature, used by 1000s of applicants yearly.
- Enabled auto-filling for enrollment messages, improving the admin experience and cutting manual effort by 50%.
- Upgraded two applications from Laravel 6 to Laravel 9, ensuring optimal performance and compatibility with the latest technologies, which resulted in a **40% reduction in page load times** and **better security compliance**.
- Engaged throughout the entire software development lifecycle, from ideation and design to code development and quality assurance testing, contributing to the timely delivery of key projects.

#### Education

University of Toronto 2021 – 2025

HBSc – Computer Science (Co-op) Software Engineering Specialist HBSc – Statistics Statistics Major

#### Awards

- Dean's List of Academic Excellence (2022)
- University of Toronto Scholarship (2021)

### **Projects**

# Magnify Access Grant Application Platform • View on GitHub MVC Architecture | MERN | Tailwind CSS | Jest

- Increased project **performance by 20%** through stakeholder interviews, identifying 4 critical missing components.
- Led an Agile scrum of 7 and restructured roles by drafting a sprint report and projection, resulting in a 30% boost in task delegation and a 40% improvement in progression rate.
- Enhanced code quality by 10% through the adoption of 13 reusable React components, consistent Tailwind CSS styling, and resolving 6 critical bugs via Jest unit testing for back-end APIs.
- Implemented DevOps principles with continuous integration, using Jira for sprint planning and tracking, and Docker for containerization, completing the CI/CD pipeline.

#### Course Scheduler View on GitHub

Java | Firebase | Junit | Mockito | OOP

- Designed an Android mobile app with user-friendly front-end interfaces in an Agile Scrum of 5.
- Integrated Firebase Realtime Database, applied **OOP** and **SOLID** principles for efficient back-end development, improving database **query performance by 30%** and reducing **data retrieval time by 20%**.