

MHSERRAO

Toronto, ON
mhserrao.dev

WORK EXPERIENCE

Senior Software Developer on the Global End User Services Team – RBC, Toronto, Ontario

January 2023 – Present

- Led **6 applications** across **4 diverse technology stacks (C#/.NET, Java/Spring Boot, Python/Flask, Swift)**, supporting over **45k+ end users**.
- Spearheaded documentation standards, developing templates adopted by team to streamline handover process by **at least 3 hours per feature enhancement** and improve visibility of services to business counterparts.
- Operated **3 CI/CD pipelines** and facilitated application deployments through change request creation, deployment documentation provision, and coordination of deployment teams to ensure timely delivery of promised features to business clients.
- Proactively identified and mitigated **over 20 application vulnerabilities** to minimize risk to clients and maintain integrity and security of services.
- Increased efficiency of daily batch processes by **over 70%**, identifying the rate-limiting step and creating/utilizing a more effective algorithm to complete the task.

Software Developer @ Amplify Program – RBC, Toronto, Ontario

May 2022 – August 2022

- Practiced **consistent agile methodologies** to address stakeholder needs identified through user interviews and process mapping to synthesize a procurement professional matching application for RBC clients created with **Java/Spring Boot/Angular/Python/Flask/Oracle DB**.
- Leveraged a **sophisticated matching algorithm** during the procurement matching process, increasing the speed of the procurement matching process from **3 days to 30 seconds**, thereby saving **2100 hours of labour per year** and maintained a guaranteed accuracy of **over 80%**.
- Presented the tech solution to high-level executive sponsors and placed **top 6 out of 18 teams** at Amp Expo and received the **"Biggest Pivot" award** to acknowledge the team's ability to overcome significant challenges and deliver an innovative tech solution with clear business value.
- Received the **"Student Ampy" award** individually, recognizing exemplary demonstration of Amplify values such as positivity and friendship.

Business and Data Analyst – Rogers, Brampton, Ontario

September 2021 – December 2021

- Collaborated with **8 cross-functional teams** to conceive, design, and implement a reporting tool application using the **Microsoft Power Suite (PowerApps, Power Automate)** reducing manual labour by **120 hours per year**.
- Developed **comprehensive documentation** for the reporting tool, ensuring clarity and accessibility for end-users. Acted as the **primary point of contact** for users experiencing issues, providing prompt support/troubleshooting to resolve technical challenges efficiently.
- Proactively expanded technical expertise by exploring and leveraging various tools, including **Power BI** and **Excel Macros**, to increase future scope of reporting.

EDUCATION

Software Development & Network Engineering (SDNE) Diploma, High Honours (GPA: 3.98) – Sheridan College, Oakville, Ontario

Awarded Sheridan Silver Medal Award (for the highest GPA in the program)

September 2019 – December 2022

Bachelor of Health Sciences (BHSc), (GPA: 3.94) – University of Ottawa, Ottawa, Ontario

September 2013 – June 2017

PROJECTS

MakeMe!: Makeup Tutorial Application: an innovative facial recognition application designed to allow users to virtually apply different styles of makeup onto their faces and select their preferred look to access step-by-step tutorials on how to achieve that specific makeup style.

- Utilized **Flutter & Dart** for the frontend development and embedded a **Unity widget using Unity AR Foundations** for facial recognition features. Filters were developed with **Adobe Photoshop**.
- Developed MakeMe! within a dedicated team, conducting **extensive market research and client analysis** to determine the most effective features that would allow users to choose their makeup design in **30 seconds or less**, reducing overall makeup design choice fatigue.
- **Presented the minimal viable product (MVP)** to a panel of judges and was awarded with the prestigious **Sheridan EDGE Ready Award** for demonstrating the highest level of impact and entrepreneurship for a Capstone project.

[GitHub \(Unity Component\)](#) | [BitBucket \(Flutter Component\)](#) | [QR Code for Download \(for Android users!\)](#) | [Pitch \(Click here to watch!\)](#)

TECHNICAL SKILLS

Programming Languages:	Java, Kotlin, Python, PHP, C#, C, Swift, Scala, JavaScript, TypeScript
Frameworks/Platforms:	Spring Boot, .NET Framework, JUnit, Angular, React, Node.js, Spark, Hadoop, Django
APIs/Libraries:	RESTful APIs, Fetch API, jQuery
CI/CD Tools:	Jenkins, UCD, OpenShift RedHat
Web Development:	HTML5, CSS, XML, Ajax
Containerization Tools/Platforms:	Docker, Kubernetes
Cloud Platforms:	AWS, PCF
Software:	VMWare, VirtualBox, FileZilla, Visual Paradigm, Adobe XD, Figma
Databases:	PostgreSQL, MySQL, NoSQL, MongoDB, PLSQL, Oracle DB
Version Control Systems:	Git, SVN
Event-Based Systems:	Redis
Systems:	Linux (including command line), Microsoft OS, Mac OS
Design and IDE Tools:	Android Studio, Visual Studio, Visual Studio Code, XCode, Eclipse, Atom
Agile Methodologies:	Scrum, Kanban, Jira
Additional Interests:	Data Pipelines, AI, Natural Language Processing, Machine Learning, Integration Platforms, Data Platforms (Snowflake, Databricks)