

Saad Shahbaz

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EDUCATION

McGill University

BA Computer Science, Minor Management

- **CGPA: 3.79** - Dean's Honour List, Tomlinson Award

Sep 2019 – Dec 2022

Montreal, QC

TECHNICAL SKILLS

- **Languages:** Python, Java, C#, C, JavaScript, PHP, Bash, SQL, Assembly, VBA, R, CSS, HTML
- **Technologies:** Git, Linux, Unix, Docker, Power BI, Jira, MySQL, Pandas, NumPy, PyTorch, TensorFlow, React, MongoDB, Node.js, Jenkins, TeamCity, Bitbucket
- **Cloud Computing:** Amazon Web Services (AWS), Microsoft Azure, Oracle

WORK EXPERIENCE

Software Developer Intern

CitiBank

May 2022 – Aug 2022

Mississauga, ON

- Migrated from ADM to ATOM (deployment tool) to deploy add-ons and Composer (an in-house research tool) to employees' machines, saving a tremendous amount of resources for Citi through the removal of data central dependency.
- Developed a **CI/CD** pipeline on **TeamCity**, integrating it with **uDeploy** that pushes artifacts automatically to ATOM, thus allowing around 2500 users to switch between environments and streams seamlessly.
- Programmed an executable using **C#** that deploys the files pushed by ATOM directly to the machines' registries and folders, creating shortcuts for Composer, reducing deployment and update times by 60% and increasing version stability by 45% for first-time installations.
- **Technology Stack:** C#, TeamCity, Python, Docker, Bitbucket, Jira, React, XML, Snowflake

Data Science Intern

Air Liquide

May 2021 – Dec 2022

Montreal, QC

- Led the S&OP (Sales and Operations) project, utilizing **Python** and machine learning models (such as **ARIMA** and **Facebook Prophet**) to accurately predict sales, volume, and quantity for the next 18 months with an accuracy rate of 95%.
- Developed the user interface using **Vue.js** for PowerZone, an application to identify potential clients based on zip code for 8 sales managers and over 100 sales team members.
- Conducted extensive data cleaning for 10+ projects using **Python** and **Excel**, including S&OP, CPQ, email classifications, and churn, to ensure high-quality and accurate results from machine learning models.
- Customized 20+ **MS Power BI** dashboards, visualizations, and interfaces to deliver meaningful and actionable insights on the S&OP, Email Classifications and several other projects.
- **Technology Stack:** Python, SQL, Power BI, Jira, Git, Pandas, NumPy, MS Excel, VBA

Vice President Finance and Software Engineer

Hack4Impact

Feb 2021 – Dec 2022

Montreal, QC

- Networked with industry professionals from 5 separate companies, presenting the club's sponsorship proposal, which resulted in a 100% increase in sponsorship revenue compared to the previous year.
- Led the recruitment process for the club, interviewing 54 developers and designing the 3-day full-stack development boot camp for the 12 newly hired developers.
- Collaborated with 6 developers to develop a mobile app for the MADA community center using **Flask** and **React**, which was used to aid food distribution for the elderly community in Montreal.

PROJECTS

TA Management Website

Oct 2022 – Dec 2022

- Led a team to develop a dynamic and interactive TA Management website using **HTML**, **PHP**, and **JavaScript** for the McGill School of Computer Science competition, winning first place.
- Used **SQLite3** to build a relational database for storing and retrieving data for an application, enabling the website to be hosted on McGill's servers.
- Implemented proper authentication for user access and customized pages based on user privileges.

Eventbrite Ticket Manager Software

Apr 2022

- Built a well-designed and well-documented Object-Oriented program in **Java** for Eventbrite, the event management and ticketing website, allowing customers to schedule, and calculate the expected profit from different events. Specific design patterns - e.g., Composite, Flyweight, Singleton, were used when necessary for a coherent and efficient code base.

Covid Vaccination Database Application

Feb 2021 – Apr 2021

- Created an interactive app for the COVID-19 vaccination campaign. Facilitated data management using JDBC and IBM DB2. Implemented using **Java** and **SQL**. Created a relational database model for the same.