# MOHAMMAD ABBAS MEGHANI

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- Software Engineer experienced in working within an intensive startup environment with an Agile team.
- Masters' in Data Science with a record of working on complex data-intensive applications.
- 3 years of experience with object-oriented programming in a high-volume, low-latency system.

#### **EDUCATION**

Master of Science: Data Science at HEC Montreal, University of Montreal Aug 2019 - May 2021

- Notable Achievement: Awarded scholarship for a Fin-ML Research Paper.
- Coursework: Adv. Machine Learning, Adv. Statistics, Forecasting Methods, Algorithms, ML Networks

**Bachelor of Engineering: Computer Engineering** at RCOE, University of Mumbai July 2014 - June 2018

- Notable Achievement: One of only two teams in my cohort to receive research funding.
- Coursework: Data Structures, OOP, Data Management Systems, Distributed Systems, Operating Systems, Adv. Applied Mathematics, Digital Logic Design, Microprocessor, Circuits, Web Technologies

#### WORK EXPERIENCE

# Data Scientist: Backend (C#, T-SQL, Python) at Shift-Technology

- Used design patterns in C# to make a generic and reusable data transformation tool for the Fraud Detection product, resulting in better scalability and enhancing efficiency for more than 10 clients.
- Enhanced company-wide impact by improving data transformation efficiency by 5% through the utilization of better data structures and adjustments to mapping algorithms.
- Coded hash-based deduplication filters and processes to help efficiently ingest and process tables with up to 9 billion highly duplicated rows of data within server memory constraints.

# Software Engineer: Full Stack (C#, Typescript/ React, T-SQL) at DocuFire

- Achieved a 15% increase in efficiency by implementing asynchronous parallel processing of pages in the pdf document generation module of the core ERP Solution allowing for processing of documents at scale.
- Led the transformation of a legacy project's data access layer into a REST API, preserving all existing methods. Strengthened the system with improved unit tests, ensuring enhanced functionality.
- Designed and developed the MVC backend and React frontend for an interactive ASP.Net Core Web Application, seamlessly integrating it with the REST API mentioned above.

# **Research Assistant (C#, Python, MySQL)** at HEC Montreal (Part Time)

- Created a programming guide to facilitate student and instructor usage of a realistic data simulation.
- Created and hosted a scalable C#/ASP.Net Core website with MySQL for the 'Sports Analytics' course. The system fulfilled functional requirements such as user registration, team and game sign-ups, and included an on-server Machine Learning simulation.
- Developed Python visualizations for data from a sports simulation ML model, subsequently adapting them for use on the server of the website.

# PUBLICATIONS

- Journal Publication (R, Python): "Thirty Years of Academic Finance" in the Journal of Economic Surveys (2023), a Machine Learning research paper funded by QUANTACT lab and Sentometrics Research.
- Conference Papers (C++, PHP, Java) published at Electronics and Informatics (2018), Intelligent Sustainable Systems (2017), Communication and Electronics Systems (2017) IEEE conferences.

# LANGUAGES & SERVICES

- Proficient: C#, Python, SQL, .Net Core, Git, GitHub, CI/ CD TeamCity/ Octopus
- Familiar: C++, Java, PHP, React, TypeScript/ JavaScript, AWS Lightsail/ S3, ElasticSearch

# Feb 2022 - Present

#### June 2021 – Feb 2022

Sept 2020 – Oct 2023