Ammar Rehan   Toronto, ON

Data Engineer | BI Developer | Software Developer | Electrical Engineer

Email: work@.ammarrehan.live

LinkedIn: https://ca.linkedin.com/in/ammar-rehan

Website: https://ammarrehan.live

Trained as an electrical engineer, I am an IT professional with about 3 years of experience in diverse projects, including database design, data warehousing, ETL, data visualization, BI, consulting, and product development. Passionate about learning, structuring and extracting insights from data.

SKILLS

Languages:	**Python**, DAX, **T-SQL**, MySQL, **PostgreSQL**, C, C++, **Excel VBA**, Shell
Software:	**SSMS**, **SSIS**, **Docker**, Heroku, **MS Power BI**, Proxmox, **Linux Server**, **MongoDB**, **dbt**, MS **Azure** Portal/ **ADF**, WordPress, MATLAB, **Git**, JIRA, Trello, Asana, ClickUp
Soft Skills:	Critical Thinking, Adaptive/flexible, Resourceful, Organized, Communication, Observant
Certifications:	Azure Fundamentals, **Azure Data Fundamentals**, **365DataScience**
Expertise:	Database design/modelling, **Data management/validation**, **Data warehousing**, SQL Views/SP/Jobs, **SQL/NoSQL**, Web Automation, **Spark**, **CI/CD**, BI development, **OOP/MVC**, **Back-end Development**, Machine Learning, Containerization, Project management, Product development, Consulting, Academic Research, Kanban, Scrum

RELEVANT WORK EXPERIENCE

Technology Consultant, Rehan Mobin & Co- Remote   **Feb 2022 – Present**

- Developed desktop **python** application to automate data entry reducing report uploading times by over 80%. Application was based on **MVC framework**, with GUI views for getting and validating user input, web-scraping to gather relevant information and web-drivers for form entry and picture uploads.
- Setup **software delivery** on custom **domain** and launched software for over 50 users spread across 5 locations.
- Deployed **Proxmox server** with static IP and port forwarding to allow **remote access** to development environment and backup management.

Data Engineer, HashMove- Dubai, UAE   **Aug 2021 – Mar 2022**

- **Constructed data warehouse** by amalgamating order and administrative data from various **OLTP** sources, optimizing it for operational management and **analytics**.
- Developed **web scraping bot** using selenium (**python**) for extracting freight forwarder contact information from their websites accessed via online directories. This information was integrated into mailing lists and forwarders were contacted regarding specific customer queries.
- Developed **ETL pipeline** using SQL Server Integration Services (**SSIS**) to automate web scraping, data transformation and loading data into data **warehouse**.
- Developed **views** combining data from multiple master tables in the data warehouse which improved BI data modeling, query plans and query timings resulting in **faster BI** dashboard **performance**.
- Developed **stored procedures** and scheduled **jobs** to routinely transfer data from **OLTP** databases to **data warehouses**.

BI Developer, HashMove- Dubai, UAE   Apr 2021 – Mar 2022

- Designed and developed **BI dashboards**- using complex data models and custom themes and visuals- for company management (CRM/CPM), clients and partners (**analytics**). Embedded these dashboards into the HashMove web app.
- Developed **real-time** (Direct Query) **dashboards** utilizing optimized data models which were used by operations and support teams for live engagement with clients and partners.
- **Analyzed DAX query plans** and server timings on DAX studio to **improve** DAX **query performance** and optimize data models, improving dashboard performance.
- Performed **data wrangling** on data warehouse detecting **anomalies** and **exposing validation issues** within the data pipeline.

IT Consultant- Vancouver, BC   May 2020 – Apr 2021

- Developed static **WordPress website** and hosted it at no cost, on GitHub pages.
- Setup **Cloudflare** on domain for security and optimizing website performance.
- Setup **business emails** and **CRM** for business organization using Zoho suite.
- Created **ERDs** for a web application, identifying performance **bottlenecks** and **suggested optimizations** which resulted in a more scalable application.

Consulting Engineer, TECHPOS- Vancouver, BC   Sep 2019 – May 2020

- Developed **wireless communication framework**- in **python**- based on the request-response protocol to allow secure data exchange between and edge device and multiple paired IoT end devices utilizing the ZigBee spectrum.
- Developed **python**-based **configuration interface** to facilitate wireless communication including addition of end devices to network, edge device configuration, and remote configuration of end devices.
- Ensured timely development of software and prototypes adhering to **waterfall** approach. Used **Asana** for project portfolio management and delivered MVP to company on time.
- Assisted in development of multiple prototype devices using 3D modelling software and conducted prototype testing.

Research Assistant, CFET Lab, UBC- Vancouver, BC   Jun – Aug 2019

- Implemented **cloud-based data collection and management** process which increased researcher collaboration and virtually eliminated data loss.
- Reduced stack production failure rate by over 50% by developing **python** application for precise **servomotor control** and **auto-focus** of monolayers under microscope using **OpenCV**.
- Experimented with different exfoliation techniques increasing production of isolated monolayers of 2D materials (Graphene/ Tungsten Diselenide/ etc.) by over 20%.

EDUCATION

The University of British Columbia, Vancouver   Sep 2015 – May 2020
Bachelor of Applied Science in Electrical Engineering

- Recipient of Outstanding International Student Award worth $10000.
- Recipient of Chancellors Scholar Award.

Interests: Hiking/Camping, Trading/Investing, Hobby-coding, Running, Yoga, Cooking