

Omar Alashqar

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RELEVANT EXPERIENCE

Software Engineering Intern | IBM Canada Toronto, Sep - Dec 2020

- Containerized existing applications into **Docker** format for ease of deployment onto cloud platforms
- Built and monitored automated **CI/CD** pipelines for testing and deployment, improving reliability
- Designed and implemented **cloud infrastructure** for various projects using **IBM Cloud**
- Documented design decisions, trade-offs, and infrastructure details for project deployments
- Investigated the use of **event-driven** architectures utilizing **Kafka** and **gRPC** for future projects

Data Engineering Intern | Loblaw Digital Toronto, Jan - Apr 2020

- Led R&D effort for a **Data Governance** integration to proactively validate data in **BigQuery**
- Developed **ETL** data pipelines in **Python**, collaborating with teams to deliver business insights
- Migrated pipeline scheduling to **Apache Airflow** to improve system reliability and documentation
- Integrated access permission configuration (**ACL**) for BigQuery into an internal ETL framework

Software Developer | MAJiK Systems Kitchener, May - Aug 2019

- Implemented stateful streaming data pipelines using **Apache Beam** to process time-series data
- Co-Led **full-stack** development of an **IIOT** dashboard tool with rapid feedback and iteration cycles
- Developed a **GraphQL** data mocking utility to improve test coverage and design storyboarding

Software Developer | MAJiK Systems Kitchener, Sep - Dec 2018

- Implemented a task scheduling and tracking system for factory operators using recursive state machines and data streams; developed iteratively with customer feedback
- Integrated **GraphQL Subscriptions**, improving codebase readability and enabling simpler client code
- Built an alternative installer using the **WiX Toolset** for customers that cannot use Docker on Windows

PROJECTS

Link Vis | [Golang, ReactJS] Multi-threaded web crawler with a graph visualization web-app

ASCII generator | [NodeJS] Image to ASCII converter that supports files and webcam images

Robot arm visualizer | [C++, NodeJS] Utility to visually test IK path planning for 3R robot arm

Reddit Clone | [NodeJS, ReactJS] Full-stack reddit clone with posts and votes

SKILLS

Languages	C, C++, Golang, Java, JavaScript, TypeScript, Python, Bash, Verilog, RISC-V ASM
Technologies	SQL, MongoDB, BigQuery, Kafka, ZooKeeper, NGINX, NodeJS, ReactJS, GraphQL
Tools	Docker, Jenkins, Git, AWS, GCP, IBM Cloud, Linux
Hobbies	Reading, Boulderling, Design, Movies, Gaming, Ping pong, and more!

EDUCATION

BASc in Computer Engineering | University of Waterloo Sep 2017 - May 2022 (Expected)

- President's Scholarship for Academic Achievement, 2x Term Dean's Honours List
- **Relevant courses:** Distributed Computing, Computer Security, Compilers, Networking, OS