

Omar Alashqar

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EXPERIENCE

Software Developer | MAJiK Systems

Kitchener May - Aug 2019

- Implemented stateful streaming pipelines using Apache Beam to process time-series data for training ML models
- Co-Lead development of an IIOT dashboard tool and improved industrial protocol drivers for PLC communication
- Developed and migrated custom nodes compatible with Node-RED for IIOT connectivity, PLC mining, and more
- Built a GraphQL data mocking utility, improving test coverage and storyboarding/development speed

Software Developer | MAJiK Systems

Kitchener Sep - Dec 2018

- Implemented a task scheduling and tracking system for factory operators utilizing recursive state machines
- Extended a GraphQL API to support real-time data, reducing network latency and code-base complexity
- Built an alternative deployment tool for Windows and tested cloud database providers

Web Developer | Rich Media

Toronto Jan - April 2018

- Developed front-end components for custom client-side routing and data visualizations using ReactJS
- Pioneered research and development for a company Google Assistant Agent to showcase products and services

PROJECTS

ASCIIfy 🌐 | A simple image to ASCII converter that supports webcam images and videos

Pollar | Social network based on the concept of liquid democracy and polls

- Spearheaded back-end and infrastructure development utilizing AWS AppSync and EC2

CounselConnect | Platform for matching with lawyers and paralegals

- Implemented the back-end service and reduced app complexity by more than 40% through new technologies

Lazorboi 🌐 | Laser display embedded system written in C for the Onion Omega2 board

- Developed a CLI for controlling a laser display embedded system through GPIO and a motor controller

No Chill 🌐 | Crossy road game clone using Java and endless random generation

Stiki | Web app for storing your notes in a real-time database

ACTIVITIES

Software & Electrical sub-teams member | UW Robotics Team

Waterloo Sep - Dec 2018

- Implemented a frame-by-frame visualizer to test and debug inverse kinematics controls for a robotic arm

Co-Founder & Tutor | High school Code Club

Mississauga Oct 2016 - Jun 2017

- Introduced students to coding in Python and Java through challenges and participated in contests as a team

Lead Programmer 🌐 | FIRST Robotics Team 6378

Mississauga Oct 2016 - Jan 2017

- Programmed robot for driver control and autonomous routines with error correction feedback in Java

SKILLS

Languages	C/C++, JavaScript, Java, Python, VHDL, RISC-V ASM
Stack and tools	NodeJS, GraphQL, Apache Beam, MongoDB, AWS, ReactJS, Jenkins, Git, FPGA
Concepts	Stream processing, graph structures, state machines

EDUCATION

Candidate for BAsC in Honours Computer Engineering | University of Waterloo

2017 - 2022

- Algorithm analysis and design with efficient data structures such as graphs and trees