

# SOLAIMAN JAWAD

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## SKILLS

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- Proficient in Python, C, C++, Go, JavaScript, Lisp, Terraform, SQL
- Interested in machine learning, backend, web development, distributed systems and cloud infrastructure

## WORK EXPERIENCE

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### Electro Source Inc

Jun – Aug '20

Software Developer (Backend)

Remote

Worked on the development of a multi-platform application to track SR&ED tax contributions

- Implemented workflows to connect with multiple ALM platforms to create, update and track issues
- Added support for email communication with application, enabling primary consumer interface
- Designed Dialogflow agents to allow for email extraction, improving issue tracking content

### Intelrad Medical Systems

Sept – Dec '19

Software Developer (Machine Learning/Infrastructure)

Toronto, ON

Worked on image recognition initiatives for Intelrad's image viewer suite and cloud deployment platform

- Automated the chest X-ray hanging protocol by developing neural networks to classify viewing angles
- Improved data collection throughput by 45% by utilizing better parsing algorithms in analysis tools
- Implemented a variation of YoloV3 for object detection of vertebrae in the spinal column
- Built scalable, fault-tolerant training and inference pipelines for multiple projects in AWS

### The Co-operators

Jan – Apr '19

Innovation Developer (Web Development)

Kitchener, ON

Led the development of chatbots, asynchronous document parsers and web APIs

- Built a quote generating chatbot that enacts dialogue and concurrently parses data from documents
- Integrated search and continue functionalities in the documentation and question tree of a hiring program
- Developed a REST API to help implement bug trackers for several projects and connected them to Jira

### BRAC University

Jun – Jul '16

Data Analyst Intern

Dhaka, BD

- Updated decision tree classifiers for a prediction model of academic success of currently enrolled students

## PROJECTS

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### mapreduce

[git.io/JU4i0k](https://github.com/msjawad/JU4i0k)

- Developing a program that emulates MapReduce, running plugin-based functions in parallel
- Uses the RPC protocol for communication between master and it's workers

### pathfinder

[git.io/JvUHK](https://github.com/msjawad/JvUHK)

- Built a program that generates mazes and displays the performance of different pathfinding algorithms

### bigRSA

[git.io/vNO7D](https://github.com/msjawad/vNO7D)

- Designed a program that uses the RSA cryptosystem to generate keys to encrypt and decrypt messages

Other notable projects: **restTorrent**, **fzySearch**, **ANeuralNet**, **go-workerpool** and more on **Github**

## EDUCATION

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### University of Waterloo

Sept '17 – Sept '22 (*expected*)

Bachelors of Mathematics, Honours