

SOLAIMAN JAWAD

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SKILLS

- Experienced with C, C++, JavaScript, Python, Node, Go, Git, Terraform, Scheme, SQL, Bash
- Interested in systems design, backend engineering, infrastructure, machine learning and data engineering

WORK EXPERIENCE

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
- Improved X-ray hanging protocol by developing neural network architecture to classify viewing angles
- Implemented and configured a variation of YoloV3 for object detection of vertebrae in the spinal column
- Updated image parsing tools to utilize better pixel mapping algorithms, improving throughput by 45%
- Built scalable, fault-tolerant training and inference pipelines for multiple projects using AWS Terraform

The Co-Operators

Jan – Apr '19

Innovation Developer (Web Development)

Kitchener, ON

- Built a quote generating chatbot that enacts dialogue and concurrently parses data from documents
- Integrated search by relevance functionality 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
- Evaluated results of analysis based on the response of quizzes, questionnaires, and student profiles

PROJECTS

pathfinder

git.io/JvUHk

- Built a program that generates mazes and displays the performance of different pathfinding algorithms
- Uses a randomised version of Prim's algorithm to generate mazes with minimal dead ends

bigRSA

git.io/vNO7D

- Designed a program that uses the RSA cryptosystem to generate keys to encrypt and decrypt messages
- Optimised the program to quickly generate and use 600 bit numbers for encryption

Biquadris

git.io/fjoeS

- Developed a turn-based Tetris game, complete with difficulty levels, greedy hinting, and a Xlib display
- Built under the object-oriented paradigm, supporting multiple design patterns and rotation algorithms

restTorrent

git.io/fjsVG

- Constructed a REST API that uses bencode URLs to track peers based on seed ratio and download files

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

EDUCATION

University of Waterloo

Sept '17 – Sept '22 (*expected*)

Computational Mathematics and Combinatorics & Optimization, Joint Major

- StarterHacks (2018), UW Data Science Club, President's Scholarship (95th percentile)