

SOLAIMAN JAWAD

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SKILLS

- Experienced with C, C++, JavaScript, Python, Go, Node, Git, Scheme, SQL, Django, Bash
- Interested in infrastructure, systems design, backend, web development, embedded systems, robotics

WORK EXPERIENCE

Intelrad Medical Systems

Sept – Dec '19

Software Developer (ML/Infrastructure)

Toronto, ON

- Developed and evaluated multiple neural network architectures to classify hanging protocols in chest X-rays, achieving an 88% F1 score on the classification of various anterior and lateral viewing angles
- Implemented and configured a variation of YoloV3 for object detection of vertebrae in the spinal column
- Built cloud backends for the training and inference of models for multiple projects using AWS Terraform
- Co-authored two research abstracts on deep learning submitted to SIIM 2020 by the Innovation Lab

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
- Incorporated search by relevance functionality in the question and form tree of a hiring program
- Constructed a REST API to help implement bug trackers for several projects and connect 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

Check out **fzySearch** (Edit Distance Spellchecker), **ANeuralNet**, **go-workerpool** and more on **Github**

EDUCATION

University of Waterloo

Sept '17 – Sept '22

Candidate for Bachelors of Mathematics, Honours

- Joint Major in Computational Mathematics and Combinatorics & Optimization
- StarterHacks (2018), UW Data Science Club, President's Scholarship (95th percentile admission average)