Solaiman Jawad

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Skills

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

Work Experience

Intelerad Medical Systems
Software Developer (Machine Learning/Infrastructure)

Sept – Dec '19
Toronto, ON

· Worked on image recognition initiatives for Intelerad's image viewer suite, cloud deployment, and more
· 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
Innovation Developer (Web Development)

Jan – Apr '19
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
Data Analyst Intern

Jun – Jul '16
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 algorithmns
· 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 algorithmns

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
Computational Mathematics and Combinatorics & Optimization, Joint Major

Sept '17 – Sept '22 *(expected)*

· StarterHacks (2018), UW Data Science Club, President's Scholar (95th percentile admission average)