

SOLAIMAN JAWAD

MSJawad.github.io — msjawad@uwaterloo.ca — in/solaiman-jawad — github.com/MSJawad

SKILLS

- Experienced with C, C++, Python, Javascript, Node, Scheme, SQL, Django, Bash, Git, HTML, CSS
- Interested in Back-end, Web Development, Infrastructure, Systems Design, Embedded Systems, Robotics

WORK EXPERIENCE

Intelerad 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 vertebra 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 using NodeJS that enacts dialogue and parses data from documents
- Authored search by relevance functionality in a hiring program, allowing it to deliver articles and image searches to users, and enabling quick lookup of queries or forms in the program's question tree
- 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

restTorrent

git.io/fjsVG

- Built a rest API that uses bencode URLs to track peers according to seed ratio and download files
- Used UDP protocol instead of traditional TCP to enable faster speeds given stable connections

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

(private repo) 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

Also check out **fzyCheck**(Edit Distance Spellchecker), **ANN**(Neural Network) 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 and Optimization
- Relevant Courses: Object Oriented Programming, Functional Programming, Data Types and Structures, Computers and Computer Systems(Assembly), Logic and Computation
- Recipient of the President's Scholarship (95th percentile admission average)