

# SOLAIMAN JAWAD

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

## SKILLS

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- Skilled in Javascript, C++, C, Python, Scheme, R, SQL, Django, Bash, Git, Keras and Tensorflow
- Interested in backend development, web development, deep learning, infrastructure, systems design

## WORK EXPERIENCE

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### The Co-Operators

Jan – Apr '19

*Innovation Developer (Web Development)*

*Waterloo, ON*

- Built a quote generating chatbot using NodeJS that enacts smart dialogue and collects data by parsing documents, reducing quote generation time by 81% by using efficient, concurrent parsing algorithms
- Implemented functionality to help advisers hire and get information on potential employees
- Authored search by relevance functionality in the 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
- Created a rest API to help implement bug trackers for several projects and connect them to Jira

### BRAC University

Jun – Jul '16

*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

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### Axys

*git.io/vpGt1*

- Developed a web platform to help developers connect with designers and collaborate on projects
- Won "Best Use of Amazon Web Services" award at Starterhacks 2018

### 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 with 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

### ANN-Bank

*git.io/fAzBD*

- Constructed a neural network that predicts the likelihood of retention of customers in a particular bank
- Used concepts like backpropagation and reinforcement learning to achieve a 86% testing set accuracy

*Other notable projects: fzySpellcheck, Biquadris, CNNandDogs and more on my **Github***

## EDUCATION

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### University of Waterloo

Sept '17 – Sept '22 (*expected*)

*Candidate for Bachelors of Mathematics, Honours*

- Joint Major in Honours Computational Mathematics and Combinatorics and Optimization
- Relevant Courses: Object Oriented Programming, Functional Programming, Algorithm Design and Data Abstraction, Data Types and Structures, Logic and Computation
- Recipient of the President's Scholarship (95<sup>th</sup> percentile admission average)