

# SHABAB AYUB

s4ayub@uwaterloo.ca · github.com/s4ayub · in/shababayub · shababayub.com

## SUMMARY

---

<b>Languages</b>	Python, Go, JavaScript, Ruby, C++
<b>Tools &amp; Frameworks</b>	React, Rails, Django, Apache Kafka, Apache Avro

## EXPERIENCE

---

<b>Shopify</b>	May - August 2017
<i>Software Engineering Intern</i>	<i>Waterloo, ON</i>

- Authored a schema validation package in Go using Avro to police data produced to Kafka
- Built features with Rails, React and GraphQL for a visual programming app to manage online shops
- Developed data-driven React components to interact with internal and third-party APIs
- Optimized CI configuration for Jest React tests to reduce overall build time by ~14%

<b>GlossGenius</b>	January - February 2017
<i>Developer Intern</i>	<i>Remote</i>

- Researched pipelining data to and from Mechanical Turk with the AWS boto library
- Architected transfer of user calendar data from AWS S3 and Turk to Django app and PostgreSQL

<b>Greenspace Mental Health</b>	September - December 2016
<i>Software Engineering Intern</i>	<i>Toronto, ON</i>

- Leveraged JavaScript and Django to refactor data visualizations and optimize therapist dashboard
- Restructured front-end and database schema to streamline registration process for patients
- Implemented centralized logging system to track server requests and improve debugging processes

<b>Deloitte</b>	January - April 2016
<i>Project Manager Intern · Data Management Team</i>	<i>Toronto, ON</i>

- Reduced documentation processes among team to streamline workflow focused on batch processing

## PROJECTS

---

<b>huffleraft</b>	git.io/v52eO
-------------------	--------------

- Developed a distributed fault tolerant key-value store in Go driven by the raft consensus protocol
- Designed a network layer to redirect commands as HTTP requests to leader node in cluster

<b>alec</b>	git.io/vM7Lk
-------------	--------------

- Built a neural network package with backpropagation allowing custom iterations and learning rate
- Bench-marked to 65.2% soft correctness when predicting sine function

<b>firebolt</b>	git.io/vXtS8
-----------------	--------------

- Constructed an Android app-controlled electric longboard with Bluetooth communication

## EDUCATION

---

<b>University of Waterloo</b>	Expected 2020
<i>B.ASc in Mechatronics Engineering</i>	<i>Waterloo, ON</i>

**Courses:** Real-time Operating Systems, Algorithms and Data Structures (C++), Statistics