

Arham Ahmed

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Skills

- Experience in Ruby, Java, and JavaScript; familiar with C, C++, Python, BASH
- Git, Google Cloud Platform, React.js, Ruby on Rails, Android, Flask, UNIX, Vim

Experience

Google

May 2017 - Aug. 2017

SOFTWARE ENGINEERING INTERN - CLOUD PLATFORM

Kirkland, Washington

- Drafted a design document for a private library hosting service running on Google App / Container Engine with a multi-tier architecture and minimized cost
- Implemented the service with 99.95% uptime and tooling to manage its deployment to Google Cloud Platform (GCP)
- Improved service CPU usage by 2.5x with asynchronous file backups triggered by whitelisted requests
- Added OAuth2, GCP compatible storage and database layer, and server orchestration to handle changing loads on top of an existing library leveraged for basic hosting functionality

Shopify

Sep. 2016 - Dec. 2016

SOFTWARE ENGINEERING INTERN - INTERNAL TOOLING

Ottawa, Ontario

- Built a scalable, dynamic, and robust mobile CI system leveraging shared storage for optimal build speed
- Automated and optimized virtual machine provisioning speed by 120% and sped up deployment by a factor of 7.6x
- Improved build times by 350% by building caching infrastructure leveraging a Shared Area Network and Redis
- Prevented concurrency problems leading to data corruption by designing efficient non-blocking alternatives
- Updated logging services in internal infrastructure to easily identify performance bottlenecks and collect statistics

Innovasium Digital

Jan. 2016 - Apr. 2016

SOFTWARE ENGINEERING INTERN - WEB APPLICATIONS

Markham, Ontario

- Developed multi-purpose management platforms using React, adhering to Facebook's Flux application architecture
- Configured development pipelines using Heroku and staging environments on AWS EC2 instances
- Rewrote legacy database logic using Ruby's ActiveRecord ORM for improving project maintainability
- Built RESTful APIs using Ruby on Rails with JSON Web Token based authentication and Amazon S3 support

Symcor Inc.

May 2015 - Aug. 2015

SOFTWARE ENGINEERING INTERN - APPLICATION DEVELOPMENT

Mississauga, Ontario

- Created interactive data visualizations using D3.js for an analytics platform processing 100,000+ transactions daily
- Led development with ETL tools (Informatica) in creating file transformation workflows and pipelines
- Wrote shell scripts in a BASIC-like language to automate file conversions of cheque documents into a custom format

Projects

Cerebrum

git.io/vwRxF

- Implemented a simple, lightweight, and easy-to-read artificial neural network library with over 3,300 downloads
- Used supervised learning with a backpropagation algorithm to form a predictive model for arbitrary input sets
- Benchmarked at 93% correctness with a 0.052% training error for MNIST data sets

Wrist Doctor

git.io/vn2Rw

- Developed a real-time web app that detects Carpal Tunnel Syndrome inducing hand movements based on heuristics
- Added mitigation functionality to show syndrome prevention techniques and push notifications on detection
- Created a wrist activity dashboard using D3.js that displayed visualizations of types of hand movements over time

Education

University of Waterloo

Sep. 2014 - Apr. 2019

CANDIDATE FOR BACHELORS OF APPLIED SCIENCE IN HONOURS COMPUTER ENGINEERING, CO-OP

GPA: 3.7

- Waterloo Merit Scholarship Recipient (2014)
- Engineering Society, Computer Science Club, Engineers Without Borders