SOLAIMAN JAWAD

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

SKILLS

· Experienced with distributed systems, databases, infra, deep learning, performance and optimization
· Python, Java, TypeScript/JavaScript(Node, React, CDK), Go, Rust, C, C++, Lisp, Ruby, SQL

EDUCATION

University of Waterloo   Sept '17 – Sept '22
Honours Bachelors of Computational Mathematics, Computing Technology Option

WORK EXPERIENCE

Amazon Web Services   *Vancouver, BC*
Software Development Engineer (Network Load Balancing)   Jan '23 – Present

· Designed connectivity canaries for availability and performance testing of load balancer end-to-end
· Built support for DPDK pdump packet capture on the primary dataplane process for data dumping
· Aided remodeling of capacity control, allowing concurrent resource deallocation to be executed safely

Software Development Engineer (API Gateway)

· Automated regional service build by introducing chained workflows, migrating resources to CDK and addressing automation gaps, reducing developer region build effort from 32 days to 4 hours
· Implemented storage prewarming and exponential jitter to service fleet records during peak traffic, reducing maximum transactions by **28%** and mitigating throttling during table rollover

Hivestack   *Toronto, ON*
Junior Software Developer (Campaigns team)   Sept – Dec '22

· Customized ad campaign API to queue runtime operations on workers, improving user experience
· Remodeled relationship between vendor & product structures, enabling grouping deals by location

INTERNSHIP EXPERIENCE

Alida   *Toronto, ON*
Software Development Intern (Touchpoint Microsurveys)   Sept '21 – Apr '22

· Built a page template which adds actions to adverts dynamically, pushing user engagement up **6%**
· Expanded custom targeting by introducing customer attributes to select customers to survey

PointClickCare   *Mississauga, ON*
Software Engineering Intern (Order Creation)   Jan – Apr '21

· Implemented React components in the order creation page from concept designs through to completion

Electro Source Inc   *Etobicoke, ON*
Software Developer Intern (SR&ED Credit Tracker)   Jun – Aug '20

· Developed a work management program that monitors SR&ED claimable projects using email digests
· Managed infrastructure using Terraform and initiated ASG scaling policies, saving **$12,000+** annually

Intelerad Medical Systems   *Toronto, ON*
Software Developer Intern (Machine Learning)   Sept – Dec '19

· Automated the chest X-ray hanging protocol by building neural networks to classify viewing angles
· Created a residual variation of YoloV3 for object detection of vertebra in the spinal column
· Improved data collection throughput by **45%** in analysis tools using Fourier transforms and OpenCV

PROJECTS

· **pathfinder** – Interface which generates mazes and visualizes different pathfinding algorithms
· **bigRSA** – Program that generates 300-digit primes to encrypt and decrypt messages using RSA