IRTAZA HAIDER

irtazahaider05@gmail.com
(404) 234 2572
irtazahaider

SKILLS

PROGRAMMING LANGUAGES/FRAMEWORKS: Java, C/C++, Python, Node.js, ReactJS, Golang
OTHERS: SQL, Docker, Kubernetes, AWS, CUDA, Spark, Android Development, Jenkins

EDUCATION

Georgia Institute of Technology — Dec. '18
MS Computer Science (Specialization: Computing Systems)

Lahore University of Management Sciences — June '17
BS Computer Science

EMPLOYMENT

SALESFORCE, INC.

Senior Member of Technical Staff, Infrastructure Engineering · San Francisco, CA — Nov. '20 to Current

Member of Technical Staff, Infrastructure Engineering · San Francisco, CA — Mar. '19 to Oct. '20

- Primary engineer on the team responsible for supporting Service Protection Framework use cases for off-CRM core services
- Enhanced the framework by adding task instrumentation based on thread dump analysis, a fault tolerant persistence layer, ability to shape traffic (block, throttle, etc) based on the metadata in the Redis cluster/database and a data pipeline to push events and metrics to other services
- Technologies worked on: Java, Spring, gRPC, Kubernetes, Docker, Service Mesh(Linkerd, Envoy, Istio)
- Working as a Scrum Master to help our team perform at the highest level

Software Engineering Intern, Infrastructure Engineering · San Francisco, CA — May '18 to Aug. '18

- Reduced round-trip time and achieved 33% more requests per second being served by Salesforce's Service Protection microservice over gRPC by leveraging shared memory communication and identifying and improving performance hotspots

GEORGIA INSTITUTE OF TECHNOLOGY

Graduate Teaching Assistant — Jan. '18 to Dec. '18

- Database Systems & Concepts, Introduction to Database Systems

DESIGN TECHNOLOGY LAB, NEW YORK UNIVERSITY

Summer Research Intern · Abu Dhabi — May '17 to Aug. '17

- Developed an Android application, Nirapod, which provides a mechanism for enabling 'tiered' privacy that allows people to share their phones while keeping their personal data private
- The interface is designed to hide the fact that multiple tiers exist, thereby reducing the likelihood that people can be compelled to reveal private data
- This work was published in 2019 CHI Conference on Human Factors in Computing Systems

PROJECTS

SPACELEASE : WEB CACHING SYSTEM IN EDGE CLOUD

- Modern cloud cache providers share the cache space among content providers in an effort to optimize the aggregate cache utility but this leads to unpredictable performance
- We developed SpaceLease, a performance-isolated cloud cache lease model that provides predictable data access latencies
- SpaceLease is implemented on top of Amazon EC2 instances with RAM as a primary storage of cache items
- SpaceLease achieved 79% reduction in the performance variability when evaluated against a 30-day Akamai data access trace

SADDLES: BIKE SHARING SYSTEM

- Designed and implemented a comprehensive bike sharing system with an Android Application and a Web Application for user interface with Flask based backend backed by MySQL

IMPLEMENTATION OF EFFICIENT RELAY SELECTION IN TOR

- As a team of three, we came up with and implemented a new scheme for TOR that makes relay selection smarter and provides better performance to TOR users.
- We were able to leverage particular requirements of different data flow types (short and long flows), user profiling and geographical location of nodes to improve user experience in the TOR network

AWARDS

Dean's Honor List (each year 2013-2017)

Student of The Year award by Cisco Systems in 2008