Syed Mohammad Qasim

Boston, MA • sqasim@bu.edu • syedmohdqasim.github.io/index • github.com/syedmohdqasim

Distributed systems researcher and former platform engineer (5+ years) working at the intersection of cloud reliability, ML-based anomaly detection, and LLM reasoning over system traces.

RESEARCH EXPERIENCE

PeacLab, Boston University, *Research Assistant* *Sept 2022 – Present*
Advisor: Prof. Ayse K. Coskun

- Built ML- and LLM-based tools/harnesses that improve observability and performance debugging in large-scale cloud platforms and applications.

Chameleon Cloud, *PhD Intern* *May – July 2024*

- Developed and deployed an ML-based anomaly detection system for Chameleon Cloud's OpenStack services, improving observability and fault detection.

PUBLICATIONS

- **S. Qasim**, Gianluca Stringhini, Ayse K. Coskun, S. Xi, D. Altınbüken, A. Yazdanbakhsh. "DSTBench: Distributed Systems Traces-Driven Agentic Performance Debugging in Microservices". **IC2E** 2026.
- **S. Qasim**, C. Hankendi, M. Sherman, K. Keahey, Gianluca Stringhini, Ayse K. Coskun. "Lessons Learned from Anomaly Detection in Chameleon Cloud". **IC2E** 2025.
- **[Best Paper Award]** Mert Toslali, **Syed Qasim**, Srinivasan Parthasarathy, Fabio Oliveira, Alan Liu, Gianluca Stringhini, Ayse K. Coskun. "Unleashing Performance Insights with Online Probabilistic Tracing". **IC2E**, Sept. 2024.
- Poster Paper: **Syed Qasim**, Mert Toslali, Quentin Clark, Srinivasan Parthasarathy, Fabio Oliveira, Alan Liu, Gianluca Stringhini, Ayse K. Coskun. "Efficient Navigation of Cloud Performance with 'nuffTrace". **IC2E**, Sept. 2023.

WORK EXPERIENCE

Uber, *PhD Software Engineer Intern* *May – Aug 2026*

- Improved the **precision of alert-triggered automated rollbacks**, reducing unnecessary rollbacks caused by low-confidence alerts.
- Enriched rollback decisions with additional context, including the **service dependency graph** and surrounding **metric context**, to better attribute an alert to the deployment that actually caused it.

State Street Corporation, *Manager, Platform Engineering* *April – Sept 2022*

- Automated **machine learning model development and deployment** using DataRobot in order to fix data drift and model decay issues, automated upgrades using Ansible Tower on 100+ servers.

State Street Corporation, *Assistant Manager, Platform Engineering* *July 2019 – April 2022*

- Designed and developed security models using 2-way TLS, IP whitelisting, OAuth2, and API keys for authentication; automated maintenance activities, including a virus scanning microservice and backups to the cloud to build a front-to-back client servicing platform using API Gateway with increased accuracy, faster processing, and reduced cost.

Thoughtworks, *Application Developer* *July 2017 – July 2019*

- Designed and developed a decentralized app (DApp) using **Ethereum-Quorum Blockchain** to create a secure and trusted ecosystem; to get consensus from all participating oil trading organizations in the consortium in order to remove slow manual reconciliation. Developed smart contracts using Solidity and deployed infrastructure on AWS ECS.
- Built scalable Spring Boot microservices (RESTful) for real-time Kafka data ingestion and dashboard updates. Engineered a custom Hibernate object-mapper to efficiently process complex, nested payloads and sustain high-throughput workloads.

EDUCATION

Boston University, *Ph.D. in Computer Engineering* *Sept 2022 – Present*

Aligarh Muslim University, *B.Tech. in Computer Engineering* *Aug 2013 – June 2017*

TECHNICAL SKILLS

Python, Java, C++, JavaScript, Ansible, Solidity, SQL, Kubernetes/OpenShift, TensorFlow, Ollama, scikit-learn, Kafka, Spring.