MUHAMMAD HASEEB

Manhattan, New York | (646) 240-6375 | mh6218@nyu.edu

https://haseeblums.github.io

EDUCATION

Ph.D. Computer Science   **Sept. 2021 – May 2025**
New York University, New York, USA
Research Focus: Distributed Systems, Networks, Microservices, Cloud Computing, AR/VR
GPA: 4.0/4.0

Bachelor of Science, Computer Science   **Sept. 2016 – May 2020**
Lahore University of Management Sciences (LUMS), Lahore, Pakistan
GPA: 3.69/4.0

PROFESSIONAL EXPERIENCE

Networking Research Intern   **June 2023 – August 2023**
Nokia Bell Labs, Murray Hill, New Jersey

- Led a project for designing and developing a streaming service for AR/VR content
- Designed and implemented a scalable streaming system that can adapt to network conditions and serve heterogeneous clients using minimal resources
- Designed an encoder/decoder for point cloud data that can tolerate packet losses

Software Engineer   **June 2020 – August 2021**
TechForge, Lahore, Pakistan

- Designed and implemented an access control system for different tools of the company
- Setup CI/CD pipeline along with testing infrastructure using TeamCity and AWS
- Automated and maintained AWS-hosted development infrastructure
- Secured the product website by eliminating critical vulnerabilities (XSS, CSRF, IDOR)

ACADEMIC RESEARCH PROJECTS

Fast, expressive, and cheap analytics for distributed traces using cloud storage

- Developed a data management system atop cloud storage for distributed tracing data
- Devised storage indices specialized for querying traces based on their graph structures
- Achieved 60% better query performance than Grafana Tempo

High-performance and scalable multicast as a cloud service

- Designed and implemented a low-latency and scalable multicast service
- Used kernel-bypass techniques (DPDK) for achieving ultra-low latency
- Achieved better latency and scalability than the multicast provided by AWS Transit Gateway

GitHub: https://github.com/HaseebLUMS