

# SHOAIB ASIF QAZI

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[Google Scholar profile](#)

## EDUCATION

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### Virginia Tech

PhD Computer Science

*Advisor:* Dr. Huaicheng Li

**CGPA:** 3.85/4

*August 2023 - Present*

### Lahore University of Management Sciences (LUMS)

BS Computer Science

*Advisors:* Dr. Fareed Zaffar and Dr. Ashish Gehani

**CGPA:** 3.79/4

*August 2015 - June 2019*

## RESEARCH INTERESTS

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I am interested in doing systems research and improving the performance of IO subsystem.

## RESEARCH PROJECTS

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### **FEMU performance enhancement**, Virginia Tech

This project aimed to enhance the performance of [FEMU](#), a QEMU based SSD emulator.

### **Filesystem aging**

Optimized the process of aging of the filesystem and reduced the aging time. This work aimed to improve aging techniques introduced in the [Geriatrx](#) paper. Instead of creating and deleting the files, I updated the metadata of the filesystem to induce free space fragmentation and age the filesystem.

### **Tool comparison**, SRI International and LUMS collaboration

This project was about evaluating the software debloating capabilities of OCCAM, Piecewise, Clang and Trimmer and improving OCCAM's ability to remove unused application code with the help of LLVM passes.

### **Regionalism**, ICSI (Berkeley) and LUMS collaboration

This project was about exploring how different users across the globe experience better or degraded Internet services based on their geographical location.

## WORK EXPERIENCE

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### **Graduate Research Assistant**, Virginia Tech

Working under the supervision of Dr. Huaicheng Li.

*August 2023 - Present*

### **Graduate Research Assistant**, LUMS

Worked on two software debloating projects under the supervision of Dr. Fareed Zaffar and Dr. Ashish Gehani.

*July 2019 - January 2021*

## RESEARCH PAPERS

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### **Trimmer: An Automated System For Configuration-Based Software Debloating**

Aatira Ahmad(LUMS) Rafae Noor (UIUC) Hashim Sharif (UIUC) Usama Hameed (UCLA) **Shoaib Asif Qazi (LUMS)** Mubashir Anwar (UIUC) Ashish Gehani (SRI) Fareed Zaffar (LUMS) Junaid Siddiqui (LUMS)

Paper accepted in the Journal **Transactions on Software Engineering (TSE)**

### **A Bestiary of Blocking. The Motivations and Modes behind Website Unavailability**

Michael Carl Tschantz (ICSI) Sadia Afroz (ICSI, UC Berkeley) Shaarif Sajid (LUMS) **Shoaib Asif Qazi (LUMS)** Mobin Javed (LUMS) Vern Paxson (UC Berkeley, ICSI)

Paper accepted in a Workshop on **Free and Open Communications on the Internet**

## ARXIV PREPRINT

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### **Exploring Server-side Blocking of Regions**

Sadia Afroz (ICSI, UC Berkeley) Michael Carl Tschantz (ICSI) Shaarif Sajid (LUMS) **Shoaib Asif Qazi (LUMS)** Mobin Javed (LUMS) Vern Paxson (UC Berkeley, ICSI)

## POSTERS

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### **Towards building a Support System for User Security Awareness**

Faqia Iqbal (LUMS), Saad Jamal (LUMS), Shaarif Sajid (LUMS) **Shoaib Asif Qazi (LUMS)** Mobin Javed (LUMS)

Poster accepted in **Usenix Security**

## TECHNICAL SKILLS

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<b>Languages</b>	C, C++, Golang, Python, Javascript
<b>Frameworks and Libraries</b>	LLVM, Socket
<b>Protocols</b>	NVMe, TCP, IP

## RELEVANT COURSES

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Advanced Topics in System Software for Modern Storage Systems  
Operating Systems  
Network-Centric Computing  
Internet measurements

## HONORS AND AWARDS

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Dean's Honor List, LUMS

*2016, 2017, 2018 and 2019*