

Work Experience	Google, New York City Software Engineer <ul style="list-style-type: none">Working on the Google public DNS resolver (8.8.8.8)	02/2022 – Present
	Facebook, Menlo Park Software Engineer Intern <ul style="list-style-type: none">Designed and implemented eBPF network telemetry for the Magma platformEnabled centralized control for cloud synchronization rates to reduce bandwidth consumption for partners in Brazil with satellite backhaul	06/2021 – 08/2021
	Max Planck Institute for Informatics (MPI), Saarbrücken, Germany Research Scientist <ul style="list-style-type: none">Worked on privacy in DNS client-side resolutionExplored structural differences between landing and internal pages of websites and how that affects prior web performance studies	05/2019 – 08/2019
	Akamai Technologies, New York City Performance Engineer Intern <ul style="list-style-type: none">Derived methods for inversion of the footprint descriptor calculus. This inversion would create representative traffic traces, preventing privacy leaks from large logs	05/2018 – 08/2018
	Arbisoft, Lahore, Pakistan Software Engineer <ul style="list-style-type: none">Full-stack web development on Python Django & Backbone.js	09/2015 – 07-2017
	Laboratory of Communications, Networks & Multimedia, NUST Undergraduate Researcher <ul style="list-style-type: none">Added analytics features to BISmark network dashboardDeployed BISmark public server at NUST	06/2013 – 09/2013
	Smart Machines & Robotics Technology Lab, NUST Undergraduate Researcher <ul style="list-style-type: none">Implemented neural network evaluation in Tele-Surgical Robotic Simulation (TSRS)Organized evaluation experiment for TSRS	12/2012 – 05/2013
Education	Department of Computer Science, Duke University Doctor of Philosophy, Computer Science <ul style="list-style-type: none">Advisor: Prof. Bruce Maggs	08/2017 – 12/2021
	Computer Science & Artificial Intelligence Lab (CSAIL), MIT Visiting Researcher	09/2019 – 09/2020
	National University of Sciences and Technology (NUST), Pakistan Bachelor of Engineering, Software Engineering <ul style="list-style-type: none">Senior Design Project: Differentiated Services over SDN-IXP	09/2010 – 06/2014
Publications	Hammurabi: A Framework for Pluggable, Logic-based X.509 Certificate Validation Policies <i>J. Larisch, W. Aqeel, C. Wilson, A. Mislove, T. Chung, D. Levin, B. Parno, and B. Maggs</i> ACM Conference on Computer and Communications Security (CCS), 2022	
	cISP: A Speed-of-Light Internet Service Provider <i>Debopam Bhattacharjee*, Waqar Aqeel*, Sangeetha Abdu Jyothi, Ilker Nadi Bozkurt, William Sentosa, Muhammad Tirmazi, Anthony Aguirre, Balakrishnan Chandrasekaran, P. Brighten Godfrey, Gregory P. Laughlin, Bruce M. Maggs, Ankit Singla</i> USENIX Networked Systems Design and Implementation (NSDI) 2022	

Puncturable Pseudorandom Sets and Private Information Retrieval with Polylogarithmic Bandwidth and Sublinear Time

E. Shi, W. Aqeel, B. Chandrasekaran, and B. Maggs
IACR Cryptology Conference (Crypto) 2021

On Landing and Internal Pages: The Strange Case of Jekyll and Hyde in Internet Measurement

W. Aqeel, B. Chandrasekaran, B. Maggs, and A. Feldmann
ACM Internet Measurement Conference (IMC) 2020

Community Contribution Award

A bird's eye view of the world's fastest networks

D. Bhattacharjee, W. Aqeel, G. Laughlin, B. Maggs, and A. Singla
ACM Internet Measurement Conference (IMC) 2020

Assertion-Carrying Certificates

W. Aqeel, Z. Hanif, J. Larisch, O. Omolola, T. Chung, D. Levin, B. Maggs, A. Mislove, B. Parno, and C. Wilson
Workshop on Foundations of Computer Security (FCS), 2020

Untangling Header Bidding Lore: Some myths, some truths, and some hope

W. Aqeel, D. Bhattacharjee, B. Chandrasekaran, P. Godfrey, G. Laughlin, B. Maggs, A. Singla
Passive and Active Measurement Conference (PAM) 2020

Best Dataset Award

Gearing up for the 21st Century Space Race

D. Bhattacharjee, W. Aqeel, I. Bozkurt, A. Aguirre, B. Chandrasekaran, P. Godfrey, G. Laughlin, B. Maggs, A. Singla
ACM HotNets 2018

Dissecting Latency in the Internet's Fiber Infrastructure

I. Bozkurt, W. Aqeel, D. Bhattacharjee, B. Chandrasekaran, P. Godfrey, G. Laughlin, B. Maggs, A. Singla
Pre-print on [arXiv](https://arxiv.org/abs/1808.08001) 2018

Benchmarking Expert Surgeons' Path for Evaluating a Trainee Surgeon's Performance

M. A. Ahmad, S. B. Mansoor, Z. A. Khan, W. Aqeel, and S. H. Kabir
ACM SIGGRAPH Virtual-Reality Continuum and Its Applications in Industry (VRCAI) 2013

* equal contribution

Teaching Experience

Duke University

- Teaching Assistant, CPS 310 Operating Systems
- Teaching Assistant, CPS 310 Operating Systems

08/2018 – 12/2018
01/2018 – 06/2018

Service

ACM Computer and Communications Security (CCS)

External reviewer

2021

ACM EuroSys

Shadow Program Committee member

2021

USENIX Operating Systems Design and Implementation (OSDI)

Artifact Evaluation Committee member

2020

Awards & Honors

- Internet Measurement Conference, Community Contribution Award 2020
- Passive and Active Measurements Conference, Best Dataset Award 2020
- Duke University Graduate School Fellowship 2017 – 2019
- SEECs-NUST Alumni Association Scholarship 2013 – 2014
- Six merit-based grants from NUST 2010 – 2014
- NUST Entrance Test scholarship for securing rank 20 out of 20,000 students 2010
- Board of Secondary Education, Karachi, scholarship for securing rank 16 out of 118,000 students 2008

Skills

Python, C, Go, JavaScript, Prolog/Datalog, Linux, git