Muhammad Muzammil | Ph.D. Candidate

New York, USA

Website ⎋ | LinkedIn ⎋ | GitHub ⎋ | Email: mmuzammil@cs.stonybrook.edu | Mobile: (+1) 631-361-0730

EDUCATION

Stony Brook University   August 2022—Present

Ph.D. in Computer Science. Focus in Web Security and Privacy. Advisor: Nick Nikiforakis   *CGPA: 3.9/4.0*

Lahore University of Management Sciences   August 2018—May 2022

Bachelors in Computer Science

EXPERIENCE

Stony Brook University (PragSec Lab)   August 2022—Present

Research Assistant   *Stony Brook, NY, USA*

- Longitudinally identified **43,000+** newly created cryptocurrency scam websites in the wild within an 8-month period
- Discovered **270,000+** high-risk Web3 domains implicated in large-scale financial fraud; developed technical defenses to mitigate these threats
- Contributing to **peer-reviewed publications** at leading computer security conferences

Infoblox   June 2024—August 2024 & May 2025—August 2025

Web Security Intern   *Tacoma, WA, USA*

- Led a project to detect expired domains re-registered by malicious actors, focusing on production-grade scalability
- Developed pipelines to detect over **30,000** re-registered domains daily, leveraging **LLMs and machine learning** to automatically identify thousands of malicious domains

Lahore University of Management Sciences   August 2020—May 2022

Research Assistant   *Lahore, Punjab, Pakistan*

- Designed and implemented an extensible benchmarking framework to evaluate software debloating tools
- Analyzed trade-offs in security, size, correctness, and build time across prominent software debloating tools.
- Demonstrated novel tool compositions that improved gadget-class reductions up to **74%**

SKILLS AND QUALIFICATIONS

- **Programming Languages & Tools**: Proficient in Python, C++, SQL, Bash, Git, RESTful APIs, Docker, and Wireshark
- **Cloud & Frameworks**: AWS cloud environments, PyTorch, and Selenium for scalable development and automation.
- **Project Design**: Design and implementation of large-scale systems with scalable and modular infrastructure.

PUBLISHED PAPERS AND ONGOING RESEARCH

1. **The Poorest Man in Babylon: A Longitudinal Study on Cryptocurrency Investment Scams**.
   M. Muzammil, A. Pitumpe, X. Li, A. Rahmati, and N. Nikiforakis
   ACM Web Conference 2025 (WWW). [⎋PDF]

2. **Panning for gold.eth: Understanding and Analyzing ENS Domain Dropcatching**.
   M. Muzammil, Z. Wu, A. Balasubramanian, and N. Nikiforakis
   ACM Internet Measurement Conference 2024 (IMC). [⎋PDF]

3. **Typosquatting 3.0: Characterizing Typosquatting in Blockchain Naming Systems**.
   M. Muzammil, Z. Wu, L. Harisha, B. Kondracki, and N. Nikiforakis
   IEEE Symposium on Electronic Crime Research 2024 (eCrime). [⎋PDF] **(Bronze Medal Award)**

4. **SoK: Evaluating Program Debloating Paradigms and Their Compositions**.
   M. Ali, **M. Muzammil**, F. Karim, A. Naeem, R. Haroon, M. Haris, H. Nadeem, W. Sabir, F. Shaon, F. Zaffar, V. Yegneswaran, A. Gehani, S. Rahaman. European Symposium on Research in Computer Security 2023 (ESORICS). [⎋PDF]

MAGAZINE ARTICLE

1. **Scams at Scale: Unmasking Crypto Fraud and Social Engineering on the Modern Web**.
   A. Pitumpe, **M. Muzammil**, X. Li, N. Nikiforakis, and A. Rahmati
   XRDS: Crossroads, The ACM Magazine for Students (2025) [⎋To Appear]

Awards and Honors

1. **Bronze Medal**, IEEE Symposium on Electronic Crime Research (2024)
   Awarded for Paper # 3.

2. **Conference Travel Grant**, ACM Internet Measurement Conference (2023)
   Awarded funding for conference attendance

3. **Chairman Fellowship**, Stony Brook University (2022 & 2023)
   Granted to top Ph.D. applicants

4. **Dean's Honor List**, Lahore University of Management Sciences (2020)
   Recognized for academic excellence

Media Coverage

- **Fast Company**: "Scammers are making thousands of dollars through blockchain typosquatting" ↗
- **Stony Brook University**: "SBU Researchers Uncover New Cybersecurity Risks in Blockchain, Win eCrime Medal" ↗
- **Science X**: "Scammers exploit tiny typos to trick people into sending money to their crypto wallets" ↗
- **State University of New York Research Foundation**: "SBU Researchers Uncover New Cybersecurity Risks in Blockchain, Win eCrime Medal" ↗

Certifications

- Deep Learning Specialization by Andrew Ng (2020) ↗
- Introduction to Data Science in Python by the University of Michigan (2020) ↗

Academic Service

- **Program Committee Member:**
  ACM WWW 2025

- **Artifact Evaluator:**
  ACM CCS 2023
  USENIX Security 2025

- **Instructor:**
  Honeypots and Intrusion Detection (SBU) x2

- **Teaching Assistant:**
  Software Security (SBU)
  System Fundamentals II (SBU)
  Introduction to Programming (LUMS) x2
  Artificial Intelligence (LUMS)
  Computational Problem Solving (LUMS)