Shiza Ali

857-588-2417 | shiza@bu.edu | linkedin.com/in/theshizaali

EDUCATION

Boston University — Sep. 2019 – Present
PhD in Computer Engineering — *Boston, MA*
- Advisor: Dr. Gianluca Stringhini
- Thesis: *Tackling Toxicity Online: Developing Comprehensive Approaches for Online Risk Detection*

National University of Computer and Emerging Sciences (NUCES) — Sep. 2014 – May 2018
B.S. in Computer Science — *Lahore, Pk*
- Magna Cum Laude — Dean's List 2014-18

EXPERIENCE

Doctoral Research Fellow — Aug. 2019 - Present
Security Lab (SeclaBU) — *Boston, MA*
- Develop methodologies to detect risks and abusive behavior online.
- Published research related to online privacy and security in various conferences such as IEEE(S&P), WebSci, etc.

Research Assistant — Aug. 2021 - Aug. 2022
Socio-Technical Interaction Research Lab (STIR Lab) — *Orlando, FL*
- Performed qualitative, and quantitative analysis (mixed-method) to gain human-centered insights into risky interactions experienced by youth online.
- Published research related to online safety in various conferences such as CHI, CSCW, etc.

Developer Advocate — Feb. 2019 - Aug. 2019
Educative.io — *Lahore, PK*
- Authored interactive courses in Machine Learning and Data Science.
- Collaborated with the development team to design features for the company website.

Research Associate — Feb. 2018 - Feb. 2019
Technology for People Initiative Lab, LUMS — *Lahore, PK*
- Designed and developed an AI model to detect inappropriate content on video streaming platforms such as YouTube to detect and block child-inappropriate content.

Software Engineer Intern — Jun. 2017 - Aug. 2017
Mindstorm Studios — *Lahore, PK*
- Served as a full-stack developer and deployed HTML5 game on Facebook.
- Collaborated with design teams and Senior Software Engineers to build customized software products.

PROJECTS

Understanding Moderation on TikTok — July 2023 – Present
- Conducted an in-depth analysis of TikTok's content moderation practices.
- Built a machine-learning tool to detect hazardous drug-related hashtags using feature engineering.

Proactive Approach to Detecting Evolving Hate Speech Online — July 2022 – July 2023
- Developed and designed a hybrid model that adapts to emerging slurs and new linguistic patterns using word embeddings to detect toxic content online.

Multi-modal Risk Detection Pipeline for Instagram Conversations — August 2021 – July 2022
- Implemented a multi-modal ensemble classifier that detects risky private conversations for youth on Instagram.

Troll Magnifier — Sep 2019 – Aug 2021
- Developed a machine-learning pipeline to detect State-Sponsored Troll Accounts on Reddit to get insights on how troll accounts operate on Reddit.

Understanding the Effects of Deplatforming on Twitter — Sep 2019 – Aug 2021
- Analyzed the effect of de-platforming users on social networking sites and explored where users migrate to and whether they become more hateful after being banned.

PUBLICATIONS

Conference

- **Shiza Ali**, Afsaneh Razi, Seunghyun Kim, Ashwaq Alsoubai, Joshua Gracie, Munmun De Choudhury, Pamela J. Wisniewski, and Gianluca Stringhini. "Understanding the digital lives of youth: Analyzing media shared within safe versus unsafe private conversations on Instagram." **Best Paper: Honorable Mention Award** (ACM CHI'22).
- Mohammad Hammas Saeed, **Shiza Ali**, Jeremy Blackburn, Emiliano De Cristofaro, Savvas Zannettou, and Gianluca Stringhini. "Trollmagnifier: Detecting state-sponsored troll accounts on Reddit." (IEEE S&P'22).
- **Shiza Ali**, Mohammad Hammas Saeed, Esraa Aldreabi, Jeremy Blackburn, Emiliano De Cristofaro, Savvas Zannettou, and Gianluca Stringhini. "Understanding the effect of deplatforming on social networks." (ACM WebSci'21).
- Rashid Tahir, Faizan Ahmed, Hammas Saeed, **Shiza Ali**, Fareed Zaffar, and Christo Wilson. "Bringing the kid back into YouTube kids: Detecting inappropriate content on video streaming platforms." (IEEE/ACM ASONAM'19).

Journal

- **Shiza Ali**, Afsaneh Razi, Seunghyun Kim, Ashwaq Alsoubai, Chen Ling, Munmun De Choudhury, Pamela J. Wisniewski, and Gianluca Stringhini. "Getting Meta: A Multimodal Approach for Detecting Unsafe Conversations within Instagram Direct Messages of Youth." (ACM CSCW'23).
- Afsaneh Razi, Ashwaq AlSoubai, Seunghyun Kim, **Shiza Ali**, Gianluca Stringhini, Munmun De Choudhury, and Pamela J. Wisniewski. "Sliding into My DMs: Detecting Uncomfortable or Unsafe Sexual Risk Experiences within Instagram Direct Messages Grounded in the Perspective of Youth." (ACM CSCW'23).

Workshops

- Afsaneh Razi, Ashwaq AlSoubai, Seunghyun Kim, Nurun Naher, **Shiza Ali**, Gianluca Stringhini, Munmun De Choudhury, and Pamela J. Wisniewski. "Instagram Data Donation: A Case Study on Collecting Ecologically Valid Social Media Data for the Purpose of Adolescent Online Risk Detection." (ACM CHI'22 - Extended Abstracts.
- Xavier Caddle, Ashwaq Alsoubai, Afsaneh Razi, Seunghyun Kim, **Shiza Ali**, Gianluca Stringhini, Munmun De Choudhury, and Pamela Wisniewski. "Instagram data donation: A case for partnering with social media platforms to protect adolescents online." (ACM CHI'21 - Workshop).
- Xavier Caddle, Afsaneh Razi, Seunghyun Kim, **Shiza Ali**, Temi Popo, Gianluca Stringhini, Munmun De Choudhury, and Pamela J. Wisniewski. "MOSafely: Building an Open-Source HCAI Community to Make the Internet a Safer Place for Youth." (ACM CSCW'21 - Companion Publication.
- Afsaneh Razi, Seunghyun Kim, Ashwaq Alsoubai, Xavier Caddle, **Shiza Ali**, Gianluca Stringhini, Munmun De Choudhury, and Pamela Wisniewski. "Teens at the Margin: Artificially Intelligent Technology for Promoting Adolescent Online Safety." (ACM CHI'21 - Workshop).

HONORS AND AWARDS

- SIGCHI Gary Marsden Travel Award, 2023
- Meta Research PhD. Fellowship Finalist, 2023
- IEEE S&P Student Grant, 2022 *($1500)*

TECHNICAL SKILLS

Languages: Python, C/C++, SQL, HTML/CSS, R
Libraries: pandas, NumPy, Matplotlib, PyTorch, SciPy, BeautifulSoup, Scikit learn, Plotly