Shiza Ali

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

EDUCATION

Boston University

Sep. 2019 – Expected May 2024

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

- Developed machine-learning models to mitigate risks and abusive behavior online.
- Published research related to online privacy and security in various conferences such as IEEE(S&P), WebSci, etc.

Research Collaboration

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 using Computer Vision 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 NLP word embeddings and BERT to detect toxic content online.

Multi-modal Risk Detection Pipeline for Instagram Conversations

August 2021 - July 2022

• Implemented a multi-modal (text, image, and metadata) 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 deplatforming users on social networking sites and explored where users migrate to and whether they become more hateful after being banned.

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." *Impact Recognition Award (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

Models: BERT, MSCOCO Image Captioning Model