

MOHAMMAD HAMMAS SAEED

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EDUCATION

Boston University PhD in Computer Engineering <u>Focus:</u> Cybersocial threats, Applied Machine Learning, and Social Computing	September 2019 - May 2024 CGPA: 3.96/4.00
National University of Computer and Emerging Sciences Bachelor of Computer Science 3rd Position in Batch of 400 Deans Honor List Award	August 2014 - June 2018 CGPA: 3.74/4.00

WORK EXPERIENCE

George Washington University Postdoctoral Associate	August 2024 - Present <i>Washington DC, USA</i>
<ul style="list-style-type: none">Working with The Institute for Trustworthy AI in Law Society (TRAILS) and Graph Lab to mitigate online risks using a data-driven approach	
Boston University Graduate Research Fellow	September 2019 - July 2024 <i>Boston, MA, USA</i>
<ul style="list-style-type: none">Worked with Security Lab (SecLabU) and collaborated with other major research labs (e.g., the iDRAMA Lab)Provided machine-learning based solutions to detect influence campaigns and coordinated hate attacksAuthored several publications at top conferences (e.g., IEEE S&P, ICWSM and WebSci)	
Boston University Graduate Teacher's Fellow	September 2020 - December 2020 <i>Boston, MA, USA</i>
<ul style="list-style-type: none">Graduate Teacher's Fellow for Software Engineering Course (EC327)Conducted labs and worked with a class of 50 as they learned core concepts of Software Engineering in C/C++	
Educative, Inc Software Engineer	February 2019 - August 2019 <i>Bellevue, WA, USA (Remote)</i>
<ul style="list-style-type: none">Worked as a Full-Stack Developer (using Python, React and HTML) in a team of 20 individuals. Worked on back-end and front-end tasks, along with code reviews and writing test-casesImplemented features directly in the live product, i.e., Educative's websiteGenerated and led new ideas for the product. Implemented the course recommendation system for the product	
Lahore University of Management Sciences Research Associate	February 2018 - February 2019 <i>Lahore, Pakistan</i>
<ul style="list-style-type: none">Responsible for mentoring new students, maintaining the website and leading research endeavorsConducted research related to internet measurement, auditing social media algorithms, image processing, web scraping and machine learningWorked with doctors at UC Davis to develop a machine learning system for detection of Tuberculosis using X-ray images and biomarkers	
Mindstorm Studios Software Engineer Intern	June 2017 - August 2017 <i>Lahore, Pakistan</i>
<ul style="list-style-type: none">Partnered with graphic designers to develop and deploy an online game using HTML5	

PUBLICATIONS

P. Paudel, **M. H. Saeed**, R. Auger, C. Wells and G. Stringhini, “*Enabling Contextual Soft Moderation on Social Media through Contrastive Textual Deviation*,” USENIX Security, 2024

M. H. Saeed, S. Ali, P. Paudel, J. Blackburn and G. Stringhini, “*Unraveling the Web of Disinformation: Exploring the Larger Context of State-Sponsored Influence Campaigns on Twitter*,” International Symposium on Research in Attacks, Intrusions and Defenses (RAID 2024), 2024

M. H. Saeed, K. Papadamou, J. Blackburn, E. D. Cristofaro and G. Stringhini, “*TUBERAIDER: Attributing Coordinated Hate Attacks on YouTube Videos to their Source Communities*,” 18th International AAAI Conference on Web and Social Media (ICWSM 2024), 2024, **BU CISE Best Paper Finalist**

M. H. Saeed, S. Ali, J. Blackburn, E. D. Cristofaro, S. Zannettou and G. Stringhini, “*TrollMagnifier: Detecting State-Sponsored Troll Accounts on Reddit*,” 2022 IEEE Symposium on Security and Privacy (SP), 2022

M. H. Saeed, J. Blackburn, G. Stringhini, “*There are N Impostors Among Us: Understanding the Effect of State-Sponsored Troll Accounts on Reddit Discussions*,” International Workshop on Cyber Social Threats (CySoc 2022), 2022

S. Ali, **M. H. Saeed**, E. Aldreabi, J. Blackburn, E. D. Cristofaro, S. Zannettou, and G. Stringhini, “*Understanding the Effect of Deplatforming on Social Networks*,” In Proceedings of the 13th ACM Web Science Conference 2021 (WebSci ’21), 2021

R. Tahir, S. Durrani, F. Ahmed, **H. Saeed**, F. Zaffar and S. Ilyas, “*The Browsers Strike Back: Countering Cryptojacking and Parasitic Miners on the Web*,” IEEE INFOCOM 2019 - IEEE Conference on Computer Communications, 2019

R. Tahir, F. Ahmed, **H. Saeed**, S. Ali, F. Zaffar and C. Wilson, “*Bringing the Kid back into YouTube Kids: Detecting Inappropriate Content on Video Streaming Platforms*,” 2019 IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining (ASONAM), 2019

RESEARCH TOOLS

Chatbot Harms: Developing an auditing system for Chatbots to identify the extent of online harm contributed by them

TUBERAIDER: Machine learning based system with over 75% accuracy in detecting and attributing hate attacks to YouTube videos

TROLLMAGNIFIER: Machine learning based pipeline to detect networks of troll accounts on Reddit with an accuracy of 97%

TECHNICAL SKILLS

Programming Skills: Python, C/C++, SQL, HTML, CSS, JavaScript, React

Libraries: Pandas, NumPy, Matplotlib, Scikit, BeautifulSoup, Selenium

Research Interests: AI/Machine Learning, NLP, Socio-technological issues, Online harms and Cybersafety

LINKS

Google Scholar: <https://scholar.google.com/citations?user=atAJTCkAAAAJhl=en>

LinkedIn: www.linkedin.com/in/hammassaeed

Website: <https://mhammas.github.io>

SERVICE

EuroS&P Workshop on Attackers and Cyber-Crime Operations (2024), Program Committee

USENIX (2024), Artifact Evaluation Committee

CSCW (2024), Reviewer

Journal of Information Technology & Politics (2024), Reviewer

REFERENCES

Gianluca Stringhini - Associate Professor (Boston University)	gian@bu.edu
Christo Willson - Associate Professor (Northeastern University)	c.wilson@northeastern.edu
Emiliano De Cristofaro - Full Professor (University of California, Riverside)	emilianodc@cs.ucr.edu