ANIQUE TAHIR

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SUMMARY

- Prolific scientist with skills and experience in Data Mining, Machine Learning, Big Data and Software Engineering.
- Led collaborative projects, resulting in peer-reviewed publications at top CS venues.
- Thorough prolific understanding of machine learning models, deep-learning, out-of-distribution inference, causal inference, uncertainty quantification, and distributed database systems.
- Self-motivated, problem-solving and collaborative scientist with excellent communication skills.

TECHNICAL SKILLS

Programming Languages.	Javascript/Node • Python • Java • C • C++ • C# • PHP • BASH
Frameworks.	jax • pytorch • tensorflow/keras • numpy • pandas • matplotlib • scikit-learn • webpack • Apache Spark • Hadoop • React • MapReduce • selenium
Utilites.	Github • Pupeteer • Docker • Nginx • qemu/kvm
OS/Cloud	Linux • BSD • Windows • AWS(S3, EC2, SQS) • GCP(Compute Engine, BigTable)

EDUCATION

- PhD, Computer Science, Arizona State University, 2019-present
- MS, Computer Science, Arizona State University, 2018
- BS, Computer Science, Lahore University of Management Sciences, 2012

EXPERIENCE

Arizona State University **Tempe, AZ**
Research Assistant *Aug 2020 - present*
- Published methods for tackling the Algorithmic Bias and Distributional Shift problems in top CS conferences and journals (CIKM, Big Data, ICDE, ICWSM, KAIS)
- Led Data Mining and Machine Learning (DMML) lab as lab manager
- Funded by NSF, AFRL and ONR

Arizona State University **Tempe, AZ**
Graduate Teaching Associate *Spring/Fall 2019, Spring/Fall 2020*
- Graduate Teaching Associate for CSE 340: Principles of Programming Languages
- Helped students with reinforcing course material by delivering recitation lectures
- Successfully provided a smooth transition from physical to online teaching for recitations during the COVID-19 crisis by designing web tools to accomodate students needs
- Created a Gradescope/Canvas(LMS) based autograder for C++ projects which provides instant feedback to students regarding their progress in course projects. This autograder has been in use since its creation for almost 6 semesters. *Every Computer Science junior at ASU* has benefited from this since its creation since the course is a requirement

Arizona State University **Tempe, AZ**
Instructor - CSE 205 *Summer 2020*
- Selected to instruct Computer Science students for the Summer semester during the COVID-19 pandemic based on previous record as a Teaching Assistant

Arizona State University **Tempe, AZ**
CIS Research Aide *May 2019 – Aug 2019*
- Successfully implemented Deep Learning models on cloud infrastructure to predict successful and unsuccessful crowd sourced projects on the internet

Arizona State University **Tempe, AZ**
Graduate Services Assistant *May 2016 – Aug 2016*
- Delivered software automation tools which used Selenium and Mechanize to mine data from the Dark Web
- Successfully led a team tasked with creating automated systems for crawling and parsing dark web data where we evolved the system to handle a large part of the dark web
- Participated in the provisional patent related to our work and one of the first people to work on the project which later became the successful startup named *CRY3CON*

Sofizar/ConstellationCK
Software Engineer *Apr 2013 – Jun 2015*

PUBLICATIONS

- Anique Tahir, Lu Cheng, and Huan Liu. "Fairness through Aleatoric Uncertainty." 2023 32nd ACM International Conference on Information and Knowledge Management (CIKM).

- Ujun Jeong, Paras Sheth, Anique Tahir, and Faisal Alatawi, H Russell Bernard, and Huan Liu. "Exploring platform migration patterns between twitter and mastodon: A user behavior study." 2024 18th International AAAI Conference on Web and Social Media (ICWSM).
- Anique Tahir, Lu Cheng, Ruocheng Guo, and Huan Liu. "Distributional Shift Adaptation using Domain-Specific Features," 2022 IEEE International Conference on Big Data (Big Data).
- Anique Tahir, Lu Cheng, Paras Sheth, and Huan Liu. "Improving Vaccine Stance Detection by Combining Online and Offline Data." SBP-BRiMS. Pittsburgh, PA (2022).
- Raha Moraffah, Paras Sheth, Mansooreh Karami, Anchit Bhattacharya, Qianru Wang, Anique Tahir, Adrienne Raglin, and Huan Liu. "Causal inference for time series analysis: Problems, methods and evaluation." Knowledge and Information Systems (2021): 1-45.
- Anique Tahir, Yuhan Sun, and Mohamed Sarwat. "An Automated Framework for Explaining Facts Extracted From Mobility Datasets." 2019 20th IEEE International Conference on Mobile Data Management (MDM). IEEE, 2019.
- Jia Yu, Anique Tahir, and Mohamed Sarwat. "GeoSparkViz in action: a data system with built-in support for geospatial visualization." 2019 IEEE 35th International Conference on Data Engineering (ICDE). IEEE, 2019.
- Faisal Alatawi, et al. "A Survey on Echo Chambers on Social Media: Description, Detection and Mitigation." arXiv preprint arXiv:2112.05084 (2021).

SERVICE

- PC Member - AAAI 2023 Conference, AAAI 2024 Conference
- PC Member - BESC 2023 Conference
- Volunteer - ASU Open Door 2023
- Volunteer - SBP-BRiMS 2022 Conference
- Subreviewer - SBP-BRiMS 2022 Conference
- Volunteer - WSDM 2022 Conference
- Subreviewer - SIGIR 2022
- Volunteer - KDD 2021 Conference
- Subreviewer - IEEE CogMI 2021
- Volunteer - CySIS lab - Arizona State University

AWARDS

- SDM 2022 Student Scholarship
- ASU SCAI Travel Award 2022
- SBP-BRiMS 2022 Travel Award

MENTORSHIP

Honored to mentor the following students:

- Qihan Wang - Peking University - Student
- Ariz Chang - Arizona State University - Amazon/ConnectWise
- Manlin Zhang - Arizona State University - DBSI-Inc

PROJECTS

My publicly available open-source projects and contributions can be found here:
https://github.com/aniquetahir