

Marzieh Bitaab

mbitaab@asu.edu | <https://mbitaab.github.io> | <https://linkedin.com/in/marzieh-bitaab> | (480) 569-4548

RESEARCH INTERESTS

My research interests are:

Applied Machine Learning
Deep Learning

Cyber Security
Natural Language Processing

EDUCATION

Arizona State University

PhD, Computer Science

Spring 2020 - 2023

Tempe, AZ

- **4.0/4.0** GPA
- Funded by [SEFCOM Lab](#)

Shiraz University

MSc, Computer Science, Cybersecurity

2015 - 2018

Shiraz, Iran

- **4.0/4.0** GPA

Shiraz University

BSc, Computer Science, Software Engineering

2011 - 2015

Shiraz, Iran

- **3.57/4.0** GPA

TECHNICAL SKILLS

Skills: Data analysis using Python, PyTorch, Pandas, Numpy, Scikit, BigQuery, Spark

Experiences: Matlab, Kotlin, and JAVA, Tensorflow, Keras

EXPERIENCES

PayPal Inc.

Summer 2023

Cyber Security Research Scientist Intern

- Worked on three research projects:
 - Analyzing Telegram messages
 - Detecting PayPal account takeovers
 - Studying scam e-commerce websites activities under the hood
- Created a complete pipeline to automatically analyze scam merchants on a daily basis
- Discovered large scam campaigns that leverage PayPal for money transfer
- Submitted two first-authored patents for the created pipelines

Palo Alto Networks Inc.

Summer & Fall 2022

Machine Learning Engineer Intern

- Researched on scam e-commerce websites
- Created a pipeline for automatic data collection and feature extraction
- Trained ML-based and NLP-based models for detecting scam e-commerce websites
- Submitted one first-authored patent for the scam shopping detection method

Hand Gesture Detection

2021

- Created an Android application to detect hand gestures through the camera
- Coded a server to receive the gesture video for analysis and detection
- Designed and trained a Convolutional Neural Network (CNN) to detect hand gestures based on video frames

Active Scam Detection Based on Social Media Data	2020
<ul style="list-style-type: none"> ▪ Crawled social media websites to gather information about scam websites ▪ Trained a scam detection model based on social media data to detect malicious websites ▪ Deployed a scam detection model on Reddit website as a bot on /r/scams (about bot) 	

Analyzing COVID-19 related Scam Domains	2020
<ul style="list-style-type: none"> ▪ Coded a crawler to automatically gather news, URLs, and DNS records from different sources ▪ Analyzed the collected data to find trends on COVID-related scam domains ▪ Investigated the attackers' activities during the COVID-19 pandemic ▪ Gave a talk at FTC's PrivacyCon'21 	

SELECTED PUBLICATIONS (Google Scholar: [Marzieh Bitaab - Google Scholar](#))

BEYOND PHISH: Toward Detecting Fraudulent e-Commerce Websites at Scale	S&P'23
Marzieh Bitaab, Haehyun Cho, Adam Oest, Zhuoer Lyu, Wei Wang, Jorij Abraham, Ruoyu Wang, Tiffany Bao, Yan Shoshitaishvili, Adam Doupé	
Scam Pandemic: How Attackers Exploit Public Fear through Phishing	eCrime'20
Marzieh Bitaab, Haehyun Cho, Adam Oest, Penghui Zhang, Zhibo Sun, Rana Pourmohamad, Doowon Kim, Tiffany Bao, Ruoyu Wang, Yan Shoshitaishvili, Adam Doupé, Gail-Joon Ahn	
Parsinlu: a suite of language understanding challenges for persian	TACL
Daniel Khashabi, Arman Cohan, Siamak Shakeri, Pedram Hosseini, Pouya Pezeshkpour, Malihe Alikhani, Moin Aminnaseri, Marzieh Bitaab , et al.	

HONORS AND AWARDS

Grace Hopper Celebration Student Scholarship	2021
Offered in recognition of academic and technical achievements	
Invited Speaker at the FTC's PrivacyCon'21	2021
Presented the effects of the COVID-19 pandemic on the rise of malicious websites	
Knowledge Mobilization Award Finalist	2021
Offered in recognition of extraordinary academic achievements	
Awarded WiML funding for the ICML conference registration	2020
Offered in recognition of extraordinary academic and technical achievements	

EXTRACURRICULAR ACTIVITIES

Teacher Assistant for CSE 545	2021
Grace Hopper Celebration Privacy and Security Committee Member	2021
Programming Competition Director at Women in Computer Science (WiCS)	2020-2021