WEIPING PEI (Ph.D.)

Assistant Professor of Cyber Studies, The University of Tulsa

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RESEARCH INTERESTS

- Security and Privacy
- Crowdsourcing
- Machine Learning

EDUCATION

Ph.D. in Computer Science, **Colorado School of Mines (MINES)**, USA, GPA: 3.9/4.0   08/2022

Thesis: Security, Privacy, and Trust in Crowdsourcing Systems

M.Eng. in Software Engineering, **Sun Yat-sen University (SYSU)**, China, GPA: 4.0/4.0   06/2017

Thesis: Water Army Recognition Based on User's Attribute Features and Behavioral Features

B.Eng. in Microelectronics, **Sun Yat-sen University (SYSU)**, China, GPA: 3.9/4.0   06/2015

WORK EXPERIENCE

Assistant Professor of Cyber Studies

The University of Tulsa (TU), Tulsa, OK, USA   08/2022 - present

Teaching Assistant/Research Assistant/Instructor

Colorado School of Mines (MINES), Golden, CO, USA   08/2017-08/2022

Machine Learning/Data Science Intern

Appen, Sunnyvale, CA, USA   02/2020-05/2020

Teaching Assistant

Sun Yat-sen University (SYSU), Guangzhou, China   09/2014-06/2015

HONORS AND AWARDS

- S&P Student Travel Grant in 2022
- GSG Travel Grant and Surplus Travel Grant at MINES in 2022
- Outstanding CS PhD Student Award at MINES in 2021
- Grace Hopper Celebration (GHC) Student Scholarship in 2018
- Outstanding Graduate Student Scholarship at Sun Yat-sen University in 2015, 2016
- Honorable Mention in the International Mathematical Contest In Modeling in 2014
- Outstanding Undergraduate Student Scholarship at Sun Yat-sen University in 2012, 2013, 2014

PUBLICATIONS

(1) **Weiping Pei** and Chuan Yue. "Generating Content-Preserving and Semantics-Flipping Adversarial Text." in *ACM ASIA Conference on Computer and Communications Security* (**AsiaCCS**), 2022 (acceptance rate: 18.4%).

(2) Zhiju Yang, **Weiping Pei**, Monchu Chen, and Chuan Yue. "WtaGraph: Web Tracking and Advertising Detection using Graph Neural Networks." in *IEEE Symposium on Security and Privacy* (**S&P**), 2022.

(3) **Weiping Pei**, Zhiju Yang, Monchu Chen, and Chuan Yue. "Quality Control in Crowdsourcing based on Fine-Grained Behavioral Features." in *ACM Conference on Computer-Supported Cooperative Work and Social Computing* (**CSCW**), 2021.

(4) **Weiping Pei**, Arthur Mayer, Kaylynn Tu, and Chuan Yue. "Attention Please: Your Attention Check Questions in Survey Studies Can Be Automatically Answered." in *The Web Conference* (**WWW**), 2020.

(5) Youye Xie, Zifan Wang, **Weiping Pei**, and Gongguo Tang. "Fast Approximation of Non-Negative Sparse Recovery via Deep Learning." in *IEEE International Conference on Image Processing* (**ICIP**), 2019.

(6) **Weiping Pei**, Youye Xie, and Gongguo Tang. "Spammer Detection via Combined Neural Network." in *International Conference on Machine Learning and Data Mining in Pattern Recognition* (**MLDM**), 2018.

(7) **Weiping Pei**, Jun Wang, Xubin Xu, Zhengwei Wu, and Xiaorong Du. "An embedded 6-axis sensor based recognition for tennis stroke." in *IEEE International Conference on Consumer Electronics* (**ICCE**), 2017.

TEACHING EXPERIENCE

- **Instructor** at TU
  CYB 3363 Data Security and Cryptography   Fall 2022
- **Instructor** at MINES
  CSCI474/574 Introduction to Cryptography/Theory of Cryptography   Spring 2022
  CSCI585 Information Security and Privacy   Fall 2021
- **Teaching Assistant** at MINES
  CSCI474/574 Introduction to Cryptography/Theory of Cryptography   Spring 2018
  CSCI 475/598 Information Security and Privacy and CSCI 471 Computer Network   Fall 2017

SERVICE AND STUDENT ADVISING EXPERIENCE

University Service

- President of Women in Cybersecurity (WiCyS) Student Chapter at Mines, 10/2020-08/2022
- White-team member (i.e., competition official) for the Mines team in the Rocky Mountain Collegiate Cyber Defense Competition (RMCCDC), March 2021

Student Advising

- Help Advise a group of high schoolers in DoD CySP Cyber-REACH 2022 Summer Research Camp at Mines.
- Helped advise graduate student at MINES: Leo Chely (Spring 2021), Riley Miller (Spring 2020), Yanina Likhtenshteyn (Fall 2019), Jonny Zeng (Fall 2019), Thien Ngo Le (Fall 2019)
- Helped advise undergraduate students at MINES in Spring 2018: Arthur Mayer, Kaylynn
- Helped advise high school research assistants in Summer 2020: Kai Hoshijo, Ava Ward, Dylan Knudsen

PROFESSIONAL ACTIVITIES

Public and/or Invited Presentation

- "Security Protection and Quality Control in Crowdsourcing", CAE Tech Talk, in January 2022.
- "Quality Control in Crowdsourcing based on Fine-Grained Behavioral Features", Conference presentation at CSCW'2021, in October 2021.
- "Attention Please: Your Attention Check Questions in Survey Studies Can Be Automatically Answered", Conference presentation at WWW'2020, in April 2020.
- Poster Presentations at Computing Mines Affiliates Partnership Program (C-MAPP) Award Event in 2019, 2020, 2021.
- Poster Presentations at Graduate Research And Discovery Symposium (GRADS), MINES, in April 2019.

Invited Guest Lecture

- Guest lectures on SQL Injection Attacks and Defenses in the CSCI 403 Database Management class, MINES, April 2019.
- Guest lectures on L3 Cache Side-Channel Attacks in the CSCI 440/563 Parallel Computing for Scientists and Engineers class, MINES, March 2019.
- Guest lectures on Making Cyberspace Secure and Trustworthy in the CSCI101 Introduction to Computer Science class, MINES, November 2018.

Journal & Conference Reviewer

- Journals: Science Advances, Intelligent Automation & Soft Computing
- Conferences: EACL 2023, EMNLP (2022, 2021), ICICS 2022, CODASPY (2022, 2021, 2020, 2019), DSN 2020

Additional Activities

- Attended CRA-W Grad Cohort Workshop for Women in April 2019.
- Attended Rocky Mountain Celebration of Women in Computing (RMCoWC) in November 2018.
- Attended Grace Hopper Celebration (GHC) in September 2018.

- ACM member.