ERIK TRICKEL

TRICKEL.COM

EDUCATION

ARIZONA STATE UNIVERSITY Tempe, Arizona
PhD in Computer Science *May 2023*

SOUTHERN METHODIST UNIVERSITY DEDMAN SCHOOL OF LAW Dallas, Texas
Juris Doctor May 2009

Graduated magna cum laude (top 5%) and licensed in Texas in November 2009 (currently inactive)

TARLETON STATE UNIVERSITY Stephenville, Texas
Bachelor of Science in Computer Information Systems December 1995

EXPERIENCE

ARIZONA STATE UNIVERSITY Tempe, Arizona
Assistant Teaching Professor August 2023 – Present

- Design and deliver interactive and engaging lectures to students, adapting teaching methods and materials to meet the learning styles and needs of diverse student populations.
- Maintain regular office hours to provide academic advising, tutoring, and mentorship to students, contributing to an improvement in student grades and overall comprehension of subjects.
- Integrate innovative technology into teaching methods to scale content delivery and enhance student learning outcomes.
- Mentor graduate and undergraduate students in their career planning and professional development, helping them to navigate their academic journeys and prepare for future opportunities.

Research Assistant for Dr. Adam Doupé August 2016 – May 2023

- Researched and published on program analysis of compiled and interpreted software applications
- Participated on multi-institutional research projects
- Mentored and assisted with questions and related issues

Course Content Developer for Dr. Adam Doupé (CSE545) Jan 2019 – August 2019

- Worked with ASU's instructional designers and Adam to produce an online version of his Software Security course
- Created knowledge check questions and assessment questions for online Software Security course
- Attended workshop on effective question creation

Teaching Assistant for Dr. Adam Doupé (CSE340) August 2016 – December 2016

- Prepared course materials and taught weekly recitation sections
- Managed student relationships on behalf of professor by responding to student concerns
- Tutored and mentored students
- Managed graders

Teaching Assistant for Dr. Robert Atkinson (CPI101, CSE464) August 2015 – May 2016

- Created all homework assignments, projects, and exams
- Taught several classes each semester

- Managed student relationships on behalf of professor responding to student concerns
- Tutored and mentored students

Instructor (ASU101)   August 2015 – May 2016

- Prepared motivational lectures, assignments, and taught classes
- Coached and mentored students

ORDER OF THE OVERFLOW   Tempe, Arizona
Challenge Writer   August 2017 - August 2021

- Worked on the Order of the Overflow team comprised of an amazing team of security experts to host the DEFCON CTF qualifiers and finals
- Developed unique capture-the-flag challenges using a wide range of languages and applications
- Deployed and supported the competition's Kubernetes based infrastructure

UNIVERSITY OF TEXAS AT DALLAS   Richardson, Texas
Teaching Assistant for Dr. Straach   January 2014 – May 2014

- Graded student papers and answered student questions

Lab Assistant for Professor Vogel   September 2013 – December 2013

- Taught the weekly C++ programming lab

NUANCESYS
Software Developer   November 2010 - August 2019

- Conceived, designed, developed, and published a complicated tracking and statistical software application for Android devices using Java and SQLite
- Organized, prioritized, and implemented the various feature requests made by the application's users
- Created training and educational videos for users

SMU DEDMAN SCHOOL OF LAW   Dallas, Texas
Teaching Assistant for Professor JoAnn Hubbard   Fall 2006 – Spring 2008

- Managed student relationships on behalf of professor by responding to student concerns
- Graded assignments

L-3 COMMUNICATIONS (FORMERLY KNOWN AS RAYTHEON)   Dallas, Texas
Principal Engineer   June 2001 – August 2005

- Resolved mission critical business problems by providing both advisory and technical assistance
- Led small and large scale application development projects that relied on Java and Oracle
- Mentored and coached programmers
- Created presentations for upper management on complex technology issues

I-BEAM BROADCASTING   Frisco, Texas
Advisory Engineer   December 99 – June 01

- Advised senior leadership on technical direction and decisions
- Led small and large scale application development projects that relied on Java and DB2

Dallas, Texas
Business Systems Analyst   January 1996 – December 1999

- Designed and developed business systems in both mainframe, server, and web environments
- Led small- and large-scale application development projects

PUBLICATIONS

- *Toss a fault to your witcher: Applying Grey-box Coverage-guided Mutational Fuzzing to Detect SQL and Command Injection Vulnerabilities*
  Security and Privacy Symposium 2023
  Trickel, E., Pagani, F., Zhu, C., Dresel, L., Vigna, G., Kruegel, C., Wang, R., Bao, T., Shoshitaishvili, Y. and Doupé, A.
- *Unleash the Simulacrum: Shifting Browser Realities for Robust {Extension-Fingerprinting} Prevention*
  USENIX Security 2022
  Karami, S., Kalantari, F., Zaeifi, M., Maso, X.J., Trickel, E., Ilia, P., Shoshitaishvili, Y., Doupé, A. and Polakis
- *Everybody is Different: Client-side Diversification for Defending Against Extension Fingerprinting*
  USENIX Security 2019
  Erik Trickel, Oleksii Starov, Alexandros Kapravelos, Nick Nikiforakis, and Adam Doupé
- *Shell We Play A Game? CTF-as-a-service for Security Education*
  Proceedings of the USENIX Workshop on Advances in Security Education (ASE), August 2017
  Erik Trickel, Francesco Disperati, Eric Gustafson, Faezeh Kalantari, Mike Mabey, Naveen Tiwari, Yeganeh Safaei, Adam Doupé, and Giovanni Vigna
- D*eep Android Malware Detection*
  ACM Conference on Data and Application Security and Privacy (CODASPY), March, 2017
  Niall McLaughlin, Jesus Martinez del Rincon, BooJoong Kang, Suleiman Yerima, Paul Miller, Sakir Sezer, Yeganeh Safaei, Erik Trickel, Ziming Zhao, Adam Doupé, and Gail-Joon Ahn

OTHER INTERESTING INFORMATION

- Table tennis enthusiast
- Snow skier
- Leadership follower
- CTF Competitor on Shellphish
- Former professional poker player