KHOI TRINH

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EDUCATION

University of Oklahoma *Expected Dec 2026*
Ph.D. in Data Science & Analytics
GPA: 4.0/4.0
Advisor: Dr. Anindya Maiti
Research Focus: AI-generated media, human-AI interaction, and accessibility and equitability in generative AI
Dissertation (in progress): *Towards Accessibility and Equitability in Generative Artificial Intelligence*
Key courses: Database Management Systems, Analytics and Metaheuristics, Intelligent Data Analytics

University of Oklahoma *Dec 2019*
M.S. in Natural Gas Engineering & Management
GPA: 3.7/4.0
Advisor: Dr. Rouzbeh Moghanloo
Thesis: *Economic Feasibility Study of Several Utilization Alternatives for a Stranded Offshore Gas Reservoir*

University of Oklahoma *Dec 2017*
B.S. in Petroleum Engineering
GPA: 3.3/4.0

RESEARCH EXPERIENCE

ScooterLab (University of Oklahoma — University of Texas at San Antonio) Aug 2023 - Present
Backend Systems Developer *Norman, OK*

· Develop and maintain a backend API for ScooterLab, an NSF-funded micromobility research project.
· Utilize Python and SQL to optimize data collection and analysis for urban transportation research.

University of Oklahoma School of Computer Science Jan 2022 - present
Graduate Research Assistant *Norman, OK*

· Conduct research on AI-generated media and its ethical implications, with a focus on making human-driven workflows for equitable and accessible.
· Utilize machine learning and statistical techniques to assess the impact of generative AI on intellectual property and societal discourse.

TEACHING AND MENTORING EXPERIENCE

Ronnie K Irani Center for the Creation of Economic Wealth Aug 2019 - Dec 2019
Graduate Assistant *Norman, OK*

· Mentored the Oil and Gas Analyst team on a 16-week analysis project of production data from the Austin Chalk, provide help and tutorial in PETRA.

Mewbourne College of Earth and Energy Jan 2018 - Dec 2019
Graduate Teaching Assistant *Norman, OK*

· Integrated Reservoir Management and Production Engineering II: Held office hours to assist an average of 200 students with questions, as well as, provided help and tutorial in PETRA.

ACADEMIC SERVICES

- **Hacklahoma:**
  - Member of the Tech team for the 2024 Hackathon.
  - Served as both Judge and Mentor for the 2025 Hackathon.
  - Lead workshops including: Spotify streaming data analysis; Introduction to LaTeX; Introduction to R.
- **Artificial Intelligence and Machine Learning Club:**
  - Outreach Director for the 2022-2023 academic year.
  - Education Co-director for the 2024-2025 academic year.
  - Lead workshops including: Introduction to data collection and machine learning; Spotify streaming data analysis; Hosting your own Stable Diffusion image generation model.
- **Data Science and Analytics Club:**
  - Vice President for the 2024-2025 academic year.
  - Coordinate workshops including: Selecting the best database for your project.

STUDENTS CO-MENTORED

- Nima Najafian (Aug 2023 - Present) - B.S. in Computer Science - Using Python and SQL to analyze GPS data and detect errors in trip trajectory the scooter fleet at ScooterLab

PUBLICATIONS & PRESENTATIONS

Manuscripts Peer-Reviewed and Published

- **A Picture is Worth a Thousand Prompts? Efficacy of Iterative Human-Driven Prompt Refinement in Image Regeneration Tasks**
  Khoi Trinh, Scott Seidenberger, Raveen Wijewickrama, Murtuza Jadliwala, Anindya Maiti
  International Joint Conference on Artificial Intelligence (IJCAI), Montreal, Quebec, Canada 2025
  Preprint: arXiv:3456.78901

- **ScooterLab: A Programmable and Participatory Sensing Testbed using Micromobility Vehicles**
  Ubaidullah Khan, Raveen Wijewickrama, Buddhi Ashan M.K., A.H.M. Nazmus Sakib, Khoi Trinh, Christina Duthie, Nima Najafian, Ahmer Patel, R.N. Molina, Anindya Maiti, Sushil K. Prasad, Greg P. Griffin, Murtuza Jadliwala
  IEEE International Conference on Pervasive Computing and Communications (PerCom) Demo Session, Washington D.C., USA 2025
  Preprint: arXiv:2501.06177

- **Economic Feasibility Study of Several Utilization Alternatives for a Stranded Offshore Gas Reservoir**
  Khoi Trinh, Rouzbeh Moghanloo
  Offshore Technology Conference (OTC), Houston, Texas, USA 2020
  DOI: 10.4043/30732-MS

Manuscripts Under Review

- **Promptly Yours? Prompt Inference and Ownership Dilemma in AI-Generated Art**
  Khoi Trinh, Joseph Spracklen, Raveen Wijewickrama, Bimal Viswanath, Murtuza Jadliwala, Anindya Maiti
  Preprint: arXiv:2410.08406

Manuscripts in Progress

- **CANARY: Change Analysis and Network Anomaly Recognition sYstem**
  Scott Seidenberger, Anindya Maiti, Khoi Trinh, Koy Wilson, Tristan Bony

- **SEADRAGON: Secure Ethereum Anonymity & Defense Relay via Advanced Global Overlay Networking**
  Scott Seidenberger, Anindya Maiti, Khoi Trinh, Koy Wilson, Tristan Bony

TECHNICAL SKILLS

Programming Languages	Python, R, Java, C++, Kotlin
Libraries	pandas, NumPy, MatPlotLib, Selenium
Fluency In	English, Vietnamese

OTHER PROFESSIONAL EXPERIENCE

Mewbourne College of Earth and Energy - Project provided by Crescent Point Energy   May 2017 - July 2017
Summer Intern   *Norman, OK*

· Conducted analysis on waterflood project effectiveness in the Uinta Basin using decline curve analysis.

Summer Operations Intern   June 2016 - August 2016
Summer Operations Intern   *Ho Chi Minh City, Vietnam*

· Analyzed gas production data for offshore natural gas fields in Vietnam.
· Reviewed technical process diagrams (PFDs, UFDs, and P&IDs) for operational optimization.

COMMUNITY ENGAGEMENT

Vien Giac Buddhist Temple   Summer 2018
Volunteer Guitar Instructor   *Oklahoma City, OK*

· Developed and delivered a structured guitar curriculum for beginner students in a community temple setting.
· Created weekly lesson plans covering technique, rhythm, and basic music theory.
· Fostered a welcoming and inclusive environment for young learners from diverse backgrounds.