Kayvon Heravi

kayvon.heravi@gmail.com | 1-702-415-3527| linkedIn/kayvonheravi | github/kheravi | kayvon's website

EDUCATION

M.S. Computer Science With Database Systems Specialization San Diego, CA | Jun 2024
University of California, San Diego
Teaching Assistant (TA): Accelerated Intro to Programming & Software Tools & Techniques Lab

B.S. Computer Science Las Vegas, NV | 2020
University of Nevada, Las Vegas
Awards: Cum Laude, First place in Computer Science Department, Fall 2020 Senior Design Awards

WORK EXPERIENCE

UC SAN DIEGO | Graduate Student Researcher San Diego, CA | Sep 2022 - June 2024

- Focused on the intersectionality of **database systems**, **causal inference**, and **machine learning** at my time at the Trustworthy Data Management Lab.
- Authored two publications, submitted to ICDE and TaDA.
- Completed a thesis under the advisement of Dr. Babak Salimi.

COLLEGE OF SOUTHERN NEVADA | Adjunct Instructor Las Vegas, NV | Sep 2023 – May 2024

- Instructed CIT 180: Database Systems, utilizing **Oracle**.
- Developed and administered assignments and exams based on personal database research, covering **SQL** and the design of conceptual and relational models.
- Taught CIT 129: Introduction to Computer Programming, using **Python** and **Raptor**.

EMERGENCY COMMUNICATIONS NETWORK | Cyber Security Intern Nellis AFB, NV | May 2019 – Aug 2020

- Utilized cybersecurity tools to analyze vulnerabilities and run compliance scans at Emergency Communications Network/Department of Energy(ECN/DOE)
- Created a script in **Powershell** and **Python** to decrease times of security checks on local networks.
- Procurement and testing of necessary tools to aid the Cybersecurity Team

PUBLICATIONS

DEMA: ENHANCING CAUSAL ANALYSIS Python, SQL, Datalakes, Double Machine Learning
Developed a framework to systematically identify and integrate diverse data sources for robust causal analysis. Utilized SQL and database concepts to merge data tables from data lakes, enhancing causal inference. Created a Python pipeline integrating Double Machine Learning for causal reasoning in user queries. Submitted as a technical paper for the 2nd International Workshop on Tabular Data Analysis (TaDA) in May 2024, with ongoing expansion of the work.

CAUSAL WHAT-IF AND HOW-TO ANALYSIS Database, Python, Flask, SQL, Causal Inference
Implemented and developed a graphical interface using Flask and Python based on "HypeR: Hypothetical Reasoning With What-If and How-To Queries Using a Probabilistic Causal Approach." The interface allows users to query data tables and visualize hypothetical changes. Utilized SQL commands, machine learning techniques, and a ground causal graph to update the database based on hypothetical user changes to a table. This work was published in December 2022 for the 39th IEEE International Conference on Data Engineering Demonstration Track.

SKILLS

Languages Taught at UCSD, CSN, Napa Institute: Java, Python, Oracle SQL
Language: SQL, C++, Java, Python, Assembler (Intel x86, MIPS), HTML, Go, R, C#
Technology: Oracle, Git, AWS, Docker, Unity, Hadoop, LaTeX, Neo4j
Systems: Mac, Windows, Linux
Relevant Coursework: Database Systems, Database Theory, Machine Learning, Analysis of Algorithms, Data Mining, Data Structures