KAYVON HERAVI
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College of Southern Nevada – Las Vegas, Nevada **February 2025- Current**
Senior Data Analyst, Institutional Research

- Developed data models and automated pipelines in Python to support institutional analytics and reporting, improving efficiency and scalability.
- Applied causal inference techniques (Double Machine Learning) to evaluate the impact of purchased technology on student enrollment, demonstrating advanced statistical and ML capabilities.
- Extracted and analyzed institutional data using SQL, resolving 50+ requests per semester from administration, faculty, and the public.
- Created interactive dashboards in Tableau (public-facing on CSN's website) to improve transparency and inform decision-making.
- Presented analytical results and strategic recommendations to VP-level leadership, directly influencing institutional investments and policy decisions.

University of California, San Diego – San Diego, California **September 2022-July 2024**
Data Science Researcher, Trustworthy Data Management Lab

- Conducted advanced research at the intersection of database systems, causal inference, and machine learning, leading to two peer-reviewed publications in ICDE and TaDA conferences in which I presented.
- Completed a thesis under the advisement of Dr. Babak Salimi, Assistant Professor in the Halıcıoglu Data Science Institute.
- Mentor undergraduate student on DEMA publication.
- Regularly read up to date research papers and present findings to research lab team.

College of Southern Nevada – Las Vegas, Nevada **September 2023 - May 2024**
Adjunct Instructor

- 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.

PUBLICATIONS

DEMA: Enhancing Causal Analysis through Data Enrichment and Discovery in Data Lakes

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. Accepted as a technical paper for the 2nd International Workshop on Tabular Data Analysis (TaDA) in June 2024, with ongoing expansion of the work.

Causal What-If and How-To Analysis Using HypeR

Implemented and developed a graphical interface using Flask and Python. 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.

PROJECTS

Who's on First

Developed a React + Vite web app that lets users design batting scenarios with MLB players, visualize stats from live data, and interact via drag-and-drop player placement. Continuing to expand the application by integrating causal inference and custom player metrics.

Devour the Tower

Created a mobile game application using C# and Unity as part of a team that won 1st place in the 2020 Computer Science Senior Design Awards. Contributed to game design, development, and optimization for an engaging player experience.

EDUCATION

University of California, San Diego – San Diego, California **2021-2024**
Master of Science in Computer Science, Concentration: Database systems
University of Nevada, Las Vegas – Las Vegas, Nevada **2018- 2020**
Bachelor of Science in Computer Science, Cum Laude

SKILLS

Programming Languages: Python, SQL, C++, Java, HTML, Go, R, C#, Assembly
Tools/Technologies: Oracle, Git, AWS, Large Language Models, Hadoop, LATEX, Neo4j, Tableau, SciKit-learn, React, PowerBI
Other: MS Office, Database Design, Causal Inference, Machine Learning, Artificial Intelligence