# Kayvon Heravi

## **Education**

#### University of Californa, San Diego

September 2021 – June 2024

MS in Computer Science

Thesis track with a specialization in Database Systems

- Student researcher under Dr. Babak Salimi, Assistant Professor in the Halicioğlu Data Science Institute
- Awarded Teaching Assistant position Fall 2021, Winter 2021, Spring 2022
- Lead T.A in Spring 2022
- Published a thesis
- O Published research paper at ICDE, submission at TaDA

## University of Nevada, Las Vegas

**September 2018 – May 2020** 

BS in Computer Science

Graduated Cum Laude

- Dean's List every semester
- First place in Computer Science Department, Fall 2020 Senior Design Awards

# Experience

#### University of California, San Diego

La Jolla, CA

Graduate Student Researcher

Sept 2022 - June 2024

- o I wrote a thesis under Dr. Babak Salimi, Assistant Professor at the Halıcıoğlu Data Science Institute.
- First author on a technical paper, "DEMA: Enhancing Causal Analysis through Data Enrichment and Discovery in Datalakes"
- o First author on a demo paper accepted by ICDE, "Causal What-If and How-To Analysis Using HYPER"
- Currently expanding on DEMA

## College of Southern Nevada

Las Vegas, NV

Instructor

*Sept 2022 - June 2024* 

- O Taught a database systems course using Oracle CIT 180
- Taught an intro to computer programming course in Python CIT 129
- O Graded and created weekly worksheets, homework, and exams

#### University of California, San Diego

La Jolla, CA

Teaching Assistant CSE11/CSE15L

Sept 2021 - June 2022

- Taught lecture material to an average of 60 students
- Tutored and aided students during office hours
- Created programs to aggregate students' participation and lab completions
- Graded exams and assignments
- Led lab sessions in person and remotely

#### Napa Valley Education Foundation (Non-Profit)

Napa Valley, CA

Sept 2017 – Present

Python 1 Instructor

August 2021 - December 2021

- O Gave students a basis of computer science knowledge through Python
- Created lesson plans and homework assignments
- Tutored and aided students during office hours
- Graded Assignments

#### **Mission Support and Test Services**

Nellis Air Force Base, NV

Cyber Security Intern

**Tutor** 

May 2019 - Dec 2019, Summer 2020

- Utilized cyber security tools to analyze vulnerabilities and run compliance scans at Emergency Communications Network/Department of Energy(ECN/DOE)
- O Procurement and testing of necessary tools to aid the Cyber Security Team
- Weekly checks to find and analyze anomalies detected on the network

Private Tutor Las Vegas, NV

O Tutored various students in subjects such as C++, Java, Python, and x86 assembly language programming

**Institute of Executive Development** 

Las Vegas, NV Iul 2018 - Oct 2018

Intern

Managed office duties and learned key office skills at Institute of Executive Development

Assisted with preparing presentations and creating activities for coaching retreats

#### Dignity Health St. Rose Hospital

Las Vegas, NV

Volunteer

*May 2014 – May 2017* 

- Worked Front Desk helping and greeting visitors while taking phone calls from nurses
- Ran errands for nurses such as discharging patients, organizing papers, and any other needed help

#### Research & Publications

## Causal What-If and How-To Analysis Using HYPER - ICDE

Dec 2022

Fangzhu Shen, Kayvon Heravi, Oscar Gomez, Sainyam Galhotra, Amir Gilad, Sudeepa Roy, and Babak Salimi. Causal What-If and How-To Analysis Using Hyper. IEEE International Conference on Data Engineering (ICDE)

- o Created a demo based on "HypeR: Hypothetical Reasoning With What-If and How-To Queries Using a Probabilistic Causal Approach"
- O Accepted in December of 2022 for the 39th IEEE International Conference on Data Engineering Demonstration Track

# Currently under submission.....

#### **DEMA: Enhancing Causal Analysis**

May 2024

Heravi, Kayvon; Dirisala, Saathvik; Salimi, Babak. (2024). DEMA: Enhancing Causal Analysis through Data Enrichment and Discovery in Datalakes

- Created an initial framework for systematically identifying and integrating relevant data from diverse sources to facilitate robust causal analysis
- Submitted as a long technical paper in May of 2024 for the 2nd International Workshop on Tabular Data Analysis (TaDA).

## **Projects**

#### Mobile Game App - Senior Design Awards

Sept 2020 - Dec 2020

- Created a stacking mobile game in a team for a capstone project using C# and Unity
- O The game "Devour the Tower" won first place in the Fred and Harriet Cox Senior design project, Fall 2020 computer science department and still available in app stores.

#### Profile Analysis, Scalability, Usability of Ivadomed

Sept 2021 - Dec 2021

- Tested the efficacy of a deep learning pipeline that streamlines the creation of models related to medical imaging tasks with partner for a research project in Data Systems for Machine Learning
- Presented the results of experiments to a workshop available to all CSE students and faculty.
- Created a paper of experimental setups and experimental conclusions

#### University of Toronto Admission Scholarship

**June 2019** 

O Awarded for enrolling with an average of 95% and above.

#### Additional

- Languages Taught at UCSD, CSN, Napa Institute: Java Python Oracle SQL
- Computer Languages Learned at UNLV: C++ Java Python Assembler (Intel x86, MIPS) SQL
- Computer Languages Learned at UCSD: Go
- Computer Languages Self Taught: R C# HTML
- Computer Systems: Mac Windows Linux
- Relevant Coursework: Database Systems Machine Learning Analysis of Algorithms Data Mining Data Structures • Compilers • Systems Programming