

Kayvon Heravi

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🌐 <https://kheravi.github.io/>

Education

University of California, 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
- 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

- I wrote a thesis under Dr. Babak Salimi, Assistant Professor at the Halicioğlu Data Science Institute.
- First author on a technical paper, "DEMA: Enhancing Causal Analysis through Data Enrichment and Discovery in Datalakes"
- 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

Adjunct Instructor

Sept 2022 - June 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.
- 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

Python 1 Instructor

August 2021 - December 2021

- 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

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)
- 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

Tutor

Sept 2017 – Present

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

Institute of Executive Development

Intern

Las Vegas, NV

Jul 2018 – Oct 2018

- 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

Volunteer

Las Vegas, NV

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) 2023.

- Created a demo based on "Hyper: Hypothetical Reasoning With What-If and How-To Queries Using a Probabilistic Causal Approach"
- 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
- 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

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