

EDUCATION

University of California, Irvine

Sept. 2019 - June. 2023

B.S. Data Science

Irvine, CA

Relevant coursework: Artificial Intelligence | Machine Learning | Operating System Principles | Complexity and Algorithms | Computer Systems Architecture | Data Structures and Algorithms | Computer Organization & Assembly | Computer Science

SKILLS

Coding Languages	Python, C++, C, C#, Go Lang, R, JavaScript, Typescript, HTML, CSS, Swift, Agile, .Net, Ruby, React, MATLAB
Data Tools	SQL, PostgreSQL, Spark, Apache Airflow, MongoDB, Docker, Kubernetes, SAS, SPSS, Tableau, Qualtrics, jQuery
Libraries and Testing	Pandas, Numpy, TensorFlow, Scikit-learn, PyTorch, Seaborn, Matplotlib, A/B Testing, Automated UnitTest,
Coding Tools	Jupyter, Git, GitHub, Bash, VS code, XCode, AWS, GCE, Vim, DataGrip, RStudio, Linux, Microsoft Office
Statistical Analysis	Significance and Hypothesis Testing, Regression, Classification, Clustering, Correlations, Probability, Power BI
Machine Learning	Neural Networks and Deep Learning, MLflow, Apache Spark, LLMs, OpenAI, MLOps, Jenkins, AWS SageMaker

EXPERIENCE

PROJECTS

Image Recognition, Maze Solver AI Project

Jun. 2023 - present

- Revamped image recognition and classification tool through the utilization of advanced algorithms and techniques in Python. Revitalized development of a Maze solver employing AI methodologies, integrating backtracking, and heuristic approaches to achieve efficient and effective solutions. Contributed to the implementation of an Emacs-like editor using C++

Bachelor's Capstone Project, UCI & Accenture

Feb. 2023 - Jun 2023

- Applied advanced Time Series Models like **ARIMA** and **SARIMAX**, along with Machine Learning techniques including **LSTM**, to refine predictions and minimize noise, achieving a **30% reduction in prediction error** to forecast California's energy consumption over the next 2, 5, and 10 years.
- Employed **Python** and **R** libraries for data analysis and visualization, presenting insights that suggested potential energy savings of up to **15% with strategic planning**.

Deep Learning Classification Project, UCI

Feb 2023 - Jun 2023

- Project aimed at **optimizing image classification algorithms** for the renowned Tiny ImageNet dataset. Employed **Pandas**, **PostgreSQL**. Seamlessly integrated data into **Jupyter notebooks**.
- Designed and implemented a **hybrid CNN and ResNet model** utilizing **PyTorch** and **Keras**
- Through exhaustive **training and evaluation**, achieved significant model performance improvements, culminating in a **top-5 accuracy rate of 92%**.

Python GUI Simulation Project, UCI

Mar 2020 - Jun 2020

- implemented a dynamic **OOP**, **Inheritance** and **GUI-based (tkinter)** simulation program allowing users to insert various objects within a virtual environment, showcasing distinct behaviors and interactions to simulate real-world scenarios.
- Assisted in **developing automated tests**, enhancing software quality and reliability. Participated in **code reviews**, learning best practices in software development and team collaboration.

PROFESSIONAL

Mathematics Tutor and TA, Irvine Valley College

Aug. 2018 - Feb. 2020

- Managing the math center** on weekends led to 2x more students showing up.
- Facilitated **4 different courses** in mathematics as a **professor assistant** by providing additional guidance to students during class or outside class in a workshop format. Assisting the college algebra course, led to a noteworthy increase of half a letter grade.
- Privately tutored** students in a range of **coding languages**, including **Python, C, and C++**, as well as various software concepts.

IT Technician and Front-End Developer, DAPA

Jun. 2015 - Jun 2016

- Managed end-to-end **setup and configuration of up to 50 desktops**, ensuring optimal performance and compatibility by selecting appropriate hardware components. Installed and **configured server-side and client-side software**, proficiently **troubleshooting IT issues** to minimize downtime and optimize productivity.
- Designed and implemented visually appealing websites using **HTML and CSS**. Practiced software development life cycle