

EDUCATION

University of California, Berkeley

Berkeley, CA

Bachelor of Arts: Data Science

- **Relevant Coursework:** Data Structures, Algorithms, Principles of Data Science, Database Systems, Artificial Intelligence, Machine Learning, Data Engineering, Data Inferences and Decisions, Probability, Web Design

EXPERIENCE

Cisco Systems

San Jose, CA

Software Engineer

Jan 2023 - Present

- Develop and integrate FastAPI RESTful APIs for CX Cloud, utilizing Snowflake to manage 500+ daily API calls and optimizing data exchange.
- Implement caching mechanisms for frequently accessed database queries, achieving a 44% reduction in data retrieval time and a decrease in API call volume.
- Utilize Docker alongside AWS services including ECR and ECS to optimize deployments, resulting in a 25% reduction in AWS EC2 instance image size and lowering resource consumption.
- Engineer a backend system for an internal Large Language Model (LLM) application using Retrieval-Augmented Generation (RAG) architecture, incorporating 2250 pages of unstructured internal documentation using OpenAI API, Langchain, Weaviate, Snowflake, and PandasAI.
- Implement LSTM, CNN, and ARIMA models for time-series forecasting and anomaly detection to optimize shutdown schedules for Meraki Wireless Access Points, translating to a 29% decrease in energy consumption and cost savings.
- Construct Python connectors for Amazon S3 and Snowflake, improving data ingestion, storage, and analytics.
- Build a tailored recommendation engine within CX Cloud, enabling user-driven upgrades from legacy Catalyst switches based on criteria such as security, sustainability, and performance.
- Mentor two interns, guiding their professional development and driving project success.

DataGood at UC Berkeley

Berkeley, CA

Project Manager, Logistics Lead, and Marketing Lead

Sep 2020 - Dec 2022

- Led a team of 8 students to help external clients find insights and solutions using computer science, data science, and machine learning techniques. Previous clients included: UC Berkeley, CIEE, and CalSafe.
- Taught fundamental computer science skills such as Git, SQL, and other libraries.
- Managed the organization's logistics and designed infographics for social media promotional campaigns.

IDEXX Laboratories

San Diego, CA

Data Science Intern

May 2022 - Aug 2022

- Investigated a data leakage issue with the company's machine learning pipeline using Spark and SQL.
- Created a classifier with an accuracy of 88% to classify transaction items using feature engineering, natural language processing, H2O AI, and deployed it into the company's latest ontology version.
- Automated Avro and Parquet data wrangling, saving 1.5 hours per week previously spent on manual tasks.

UC Berkeley Research Laboratory

Berkeley, CA

Undergraduate Research Intern

Sep 2021 - May 2022

- Conducted research in machine learning (DE-TR) in collaboration with the US Army Research Laboratory.
- Researched ethical implications surrounding facial recognition technology and generated weekly reports.

Nozomi Networks

San Francisco, CA

Data Engineer Intern

May 2021 - Aug 2021

- Developed neural network models to forecast time-series data for IoT devices using Keras, TensorFlow, and an ensemble classifier to detect anomalies with a 92% accuracy.
- Presented project progress, outcomes, and key insights to the CTO at the conclusion of the internship.

SKILLS

Languages: Python, Java, R, SQL, HTML, CSS, JavaScript, TypeScript

Libraries/Frameworks: FastAPI, NumPy, Pandas, Tensorflow, Keras, Scikit-Learn, React, Matplotlib

Others: AWS, Snowflake, Docker, OpenAI, Langchain, Dbt, Spark, Hadoop, Weaviate, Git, JUnit, Jenkins