

# Andrew Nguyen

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## EDUCATION

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**University of California, Irvine** | Master of Data Science Expected Dec. 2025

**University of California, Santa Barbara** | B.S. Statistics and Data Science Dec. 2023

## SKILLS

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Python | R | SQL | Bash | Git/GitHub | TensorFlow/Keras | seaborn | Google Cloud Platform | BigQuery | Airflow

## EXPERIENCE

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**Data Analytics Intern** Jun. 2025 - Aug. 2025

*Cotality* | Irvine, California

- Monitored AVA generative model performance using BigQuery for data analysis and anomaly detection
- Automated model surveillance workflows on GCP using Airflow to ensure consistent performance tracking

**Engineering Intern** Apr. 2024 - Aug. 2024

*Picarro, Inc.* | Santa Clara, California

- Developed and deployed python based PS2 gas investigation tool tailored for clients, leveraging ArcGIS Pro and GeoPandas to improve investigation accuracy
- Created and presented data visualizations in python using ggplot2, pandas, and Matplotlib to communicate actionable insights to executives
- Built automated data pipelines using python and SQL, extracting data requests from company database, processing and delivering information using Slack, Box, and GeoServer APIs. This automation streamlined daily data report requests, reducing manual work and improving data access for clients

**Data Analytics Intern** Jun. 2023 - Sep. 2023

*Picarro, Inc.* | Santa Clara, California

- Developed python neural network for anomaly detection (93% F1, 0.01% imbalance) and deployed Slack bot on AWS EC2 to automate alerts, eliminating manual monitoring
- Extracted performance data from Jira using python and PostgreSQL into Superset for a performance metrics dashboard

## PROJECTS

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**Stock Price Forecasting with Hidden Markov Models** Jun. 2025

Predicting stock prices of FAANG companies using multivariate Markov models

- Performed AIC based parameter tuning to optimize hidden state selection for each stock
- Implemented traditional and window-based prediction methods for daily closing price forecasting
- Achieved MAPE as low as 1.12% across stocks, with traditional prediction outperforming in volatile cases

**Medical Study Service Area (MSSA) Scoring Algorithm** Aug. 2024

Geospatial analysis of MSSAs to prioritize medical resource allocation with GeoPandas and Folio

- Quantified MSSAs by their access and quality to healthcare facilities
- Expanded an existing binary scoring algorithm to a nuanced ranking system for MSSAs, including additional metrics for prioritization to designate areas of high priority for medical resource allocation