# Ashwin Ramaseshan

Email: ashwin.ramases@gmail.com
Linkedin: https://www.linkedin.com/in/ashwin-ramaseshan-a63188201/
Mobile: 510-359-8195
Github: https://github.com/Ashwin987


## Education

- **University of California, Los Angeles** — Los Angeles, California
  *Masters in Applied Statistics and Data Science; School of Physical Sciences* — *Sept 2024 - Dec 2026*

  ***Courses:*** *Machine Learning, Applied Regression, AWS, Data Management, Artificial Intelligence, Statistical Programming*

- **University of California, Riverside** — Riverside, California
  *Bachelor of Science in Computer Science; College of Engineering* — *Sept 2020 - June 2024*

  ***Courses:*** *Algorithms, Data Structures, Operating Systems, Software Construction, Big Data Management, Computer Architecture*

## Experience

- **Behavioral Economics and Decision Making Lab** — Riverside, CA
  *Data Scientist Intern* — *Aug. 2023 – Jun. 2024*
  - Developed a financial sentiment analysis model using text mining to improve tone and sentiment extraction in corporate earnings calls, achieving **87% accuracy**.
  - Analyzed linguistic and sentiment features from **500+ earnings call transcripts using NLP techniques** to identify patterns influencing stock price movement.
  - Researched, fine-tuned, and integrated **Large Language Models (LLMs)** for sentiment classification, improving contextual understanding of financial narratives and delivering more precise, sentiment insights.

- **Jora** — Los Angeles, CA
  *Software Developer* — *Mar. 2024 – Dec. 2024*
  - Developed **linear regression models** in Python and R to forecast concert ticket sales, leveraging key predictors such as marketing spend, location-level engagement, and real-time **Spotify API** streaming metrics.
  - Automated ETL workflows using **SQL + Python (pandas)** to extract, transform, and load engagement data for model training and monitoring.
  - Built a RESTful API framework managing users, artists, events, and venues with **99.9% uptime** handling 1,000+ API requests daily
  - Partnered with **cross-functional teams** (engineering, marketing, operations) to align technical development with business objectives, accelerating product delivery and user engagement growth.

- **NFL Sherpa Analytics** — Remote
  *Data Scientist Intern* — *Aug. 2022 – Sep. 2023*
  - Built **forecasting models** to project player fantasy performance trends across a season, improving predictive accuracy for draft decisions.
  - Performed clustering (K-Means) on 2,000+ players to group skill levels and inform draft recommendations.
  - Partnered with product managers and operations to translate analytical results into actionable strategies and A/B tests.
  - Improved forecasting precision by **85%** (AUC +0.12 vs. baseline; 5-fold CV) using decision trees, random forests, neural networks, and regression models.
  - Delivered **Tableau dashboards highlighting top-performing players**, enabling faster draft decisions and contributing to increased subscription revenue, and created visually engaging presentations in **Microsoft PowerPoint** to communicate insights.

## Projects

- **Predictive & Generative AI for Digital Marketing Data**: Collaborated on a project that evaluated generative AI models **(TabDDPM, CTGAN, TVAE, and GPT-2)** to create synthetic user engagement data for digital marketing. CTGAN demonstrated the best performance, with high fidelity and predictive utility. We benchmarked models using KS Test, JS Divergence, and classification metrics, showing that synthetic data could improve ad targeting and model generalization. **Skills Utilized : Generative AI, Diffusion Models, Synthetic Data, Python, Machine Learning, Data Evaluation**

## Publications

- **Article: "A Prediction of the 2022 NBA Draft Class"**: Published by Towards Data Science-September 2022.

## Technical Skills

- **Languages**: Python, C++, Java, TypeScript, SQL, Bash, R, SAS, C, Swift
- **Libraries/Frameworks**: Tidyverse, Scikit-learn, Keras, Random Forest, Pandas, Tensorflow, Apache Spark, Numpy
- **Developer Tools**: RStudio, GIT, Microsoft Office, A/B Testing, MySQL, AWS, Tableau, PostgreSQL, Postman