## JohnMatthew Garcia

# Machine Learning Engineer | Data Scientist | UC Berkeley Graduate

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## **EDUCATION**

# University of California, Berkeley - College of Computing

Bachelor's in Data Science - BA

Fresno City College

Associate in Economics - AA

# Georgia Institute of Technology – College of Computing

Master of Science in Computer Science (Incoming, Spring 2026)

**Selected Coursework: CS:** Structure of Computer Programs • Data Structures and Algorithms • Introduction to Artificial Intelligence • Internet: Architecture and Protocols • Machine Learning **Statistics:** • Foundations of Data Science • Techniques of Data Science • Probability for Data Science • Data Mining and Analytics • Data Engineering • Machine Learning and Data Analytics • Intro to Business Analytics

# WORK EXPERIENCE

UC Berkeley – Berkeley IT - Network Engineering Assistant

*Aug 2024 – Present* · 9 mos

Berkeley, California

• **Performed** hands-on network support across campus by replacing switches, restoring WiFi, configuring ports and IP addresses, and troubleshooting connectivity issues. Utilized Python/Bash scripts, conducted preventive maintenance on equipment. • **Collaborated** with HelpDesk, IST-NOS, and vendors to resolve technical issues and maintain documentation.

UC Berkeley - D-Lab - Undergrad Technician

Jan 2024 – Present · 1vr 4 mos

Berkeley

California• **Provided Cross-Disciplinary Services**: Delivered in-depth consulting, advising, and access to staff support for software or infrastructure needs at UC Berkeley's D-Lab. Assisted graduate students, faculty, and staff in advancing world-class research in data-intensive social sciences and humanities

#### **PROJECTS**

# UC Berkeley Sensor Data - Interpolation PostgreSQL, JSON

- Implemented a Hampel filter using SQL to identify outliers by calculating the median and median absolute deviation for each group, and applied winsorization by capping outlier values to the nearest boundary defined by 3 scaled MAD intervals.
- Performed interpolation by identifying data gaps, calculating start and end values for missing sequences using forward and backward filling, and generating interpolated values based on linear progression across the gap size.

## Fielding Query Performance - Baseball PostgreSQL, Database Engineering

- Optimized query performance by setting appropriate indexes, applying filters, clustering data on indexed columns, and creating materialized views to reduce execution time and overall query cost.
- Developed queries from the Lahman's Baseball Database to find various salary metrics of MLB Baseball players; MLB player metrics from Cal and other CA-specific colleges; and player metrics with above 500 "At Bats"
- Analyzed the query optimizer's decision-making process, exploring various join strategies such as hash joins, nested loop joins, and merge joins, and explained how the optimizer's choice impacted query performance.

# Disaster Tweet Classification using NLP Python, Pandas, scikit-learn, NLTK

- Preprocessed tweet text with NLTK, regex, and stopword removal to clean noisy real-world data.
- Trained and compared logistic regression, random forest, and SVM classifiers on labeled tweet dataset to detect disaster-related content. Achieved F1 score of 0.75 using SVM model, demonstrating strong performance on imbalanced and unstructured data.

## **TECHNICAL SKILLS**

Languages: Python (Pandas, Scikit-learn, TensorFlow, PyTorch), SQL (PostgreSQL), R, Java,

**Machine Learning:** Regression, Classification, Clustering, Ensembles, Bayesian & Reinforcement Learning, PCA, K-Nearest Neighbors, K-Means, Ordinary Least Squares

Data Science: Data Wrangling, EDA, A/B Testing, Causal Inference, NLP

Databases: PostgreSQL, MongoDB, Query Optimization, Data Modeling, ETL, DB Engineering

Tools & Platforms: Git, Jupyter, Hadoop, Airflow, Spark, Docker, Tableau, Power BI, Analytics Solver, Matplotlib, Seaborn

## ADDITIONAL EXPERIENCE

## **Austin Boom Real Estate**

Licensed Real Estate Agent

 $2008 - 2012 \cdot 5 \ vrs$ 

Austin, Texas

10+ years of professional sales and customer service experience across real estate, automotive, and hospitality industries.