Hasaam Butt

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Education

University of California, San Diego — La Jolla, CA　　　　　　　　　　June 2027
Halıcıoğlu Data Science Institute, B.S. in Data Science　　　　　　　　　　*GPA: 3.6*

Professional Experience

7–Eleven — Moreno Valley, CA　　　　　　　　　　　　　　　Mar 2020 — Aug 2023
Assistant Manager
- Owned cash reports, weekly schedules, monthly audits, and payroll (ADP), saving 5+ staff hours/week.
- Analyzed sales forecasts and item counts to plan biweekly shipments and shelf placement.
- Drove targeted promos by season/weather/media; **increased category sales by 25%**.

StatPilot — Sports Betting Decision Platform (DataHacks @ UCSD)　　　　Apr 2025
Hackathon Winner — Innovation Launchpad Award
- Built a SciPy-based weighting algorithm; achieved **65% betting accuracy** on API-retrieved ESPN data.
- Shipped a responsive web UI with HTML/CSS for simple, fast picks.
- Added validation checks and unit tests to ensure reliable model outputs.
- Presented the product on team's behalf; selected as a winning team for innovation and execution.

Projects

League of Legends Outcome Predictor — Game Role Analysis
Python, scikit-learn
- Ran hypothesis tests on game stats (gold, XP, damage) to quantify contribution to win probability.
- Built logistic regression and random forest baselines; **improved accuracy from 57% to 80%** via feature engineering.
- Audited model bias by comparing performance in advantaged vs. disadvantaged roles.

Mario Symbolic Music Generator
PyTorch, TensorFlow
- Used AI-assisted tooling to accelerate debugging and make training steps reproducible.
- Preprocessed MIDI into pitch-duration tensors; standardized data pipeline.
- Trained a hybrid Markov + LSTM model with tuned hyperparameters using cross-entropy loss.

Parkinson's Disease Detection
Python, Pandas/NumPy, scikit-learn
- Explored and cleaned tabular features; standardized with `StandardScaler`.
- Built an SVM classifier for binary prediction; evaluated with cross-validation.

Organizations

Data Science Student Society (DS3)　　　　　　　　　　　　　Oct 2023 — Present
Project Developer
- Created workshops and hack-related events on DS tools and techniques; supported peers with applied examples.

Associated Computing Machinery (ACM)　　　　　　　　　　　Jan 2024 — Present
Member
- Joined talks and technical discussions to deepen understanding of ML theory, optimization, and production.

Skills

Languages/Tools: Python, SQL (Postgres), Git, HTML, Excel, Java, MATLAB
ML/AI: scikit-learn, TensorFlow, PyTorch; Large Language Models (GPT-5, Claude, Copilot)