Devansh Mishra

424 Kelton Avenue, Los Angeles, CA – 90024 | P: +1 (310) 709-6890 | devanshm02@ucla.edu | LinkedIn | GitHub

EDUCATION

UNIVERSITY OF CALIFORNIA, LOS ANGELES — Los Angeles, CA
B.S., Mathematics & Computer Science – GPA: 3.75/4.00, SAT: 1520/1600 — Sept 2023 – Expected June 2027
Coursework: Software Engineering, Machine Learning, Deep Learning, Computer Vision, Data Structures & Algorithms

PROFESSIONAL EXPERIENCE

Walmart Global Tech — Bentonville, AR
Data Science Intern — March 2025 – Aug 2025
- Built a Gemini-powered RAG pipeline to analyze 400M-row, 130-feature retail dataset, enabling faster assortment insights
- Integrated 10+ additional datasets using MCP-based approach, enriching analysis with different dimensions and context of data
- Developed interactive Streamlit UI to assist 5K+ merchants understand changes to optimal mod to maximize demand
- Detected 18% negative demand forecasts in 3M+ plans, boosted confidence in forecast accuracy by explaining 92% anomalies

UCLA Scalable Analytics Institute (ScAI) Lab — Los Angeles, CA
Research Assistant — June 2025 – Present
- Designed a benchmark dataset with 3K+ annotated examples of math and logic tasks to induce overthinking in LLMs
- Developed an Overthinking Score metric combining reasoning length and redundancy to quantify thinking efficiency of models
- Built an LLM Arena to benchmark Gemini, GPT-OSS, and open-source LLMs, uncovering key factors driving overthinking

TATA Electronics (Electronics Manufacturing and Semiconductor Assembly) — Hosur, India
Computer Vision and Machine Learning Intern — Aug 2024 – Sept 2024
- Engineered a defect detection system using transfer learning (ResNet50V2); achieved 94% accuracy, AUC 0.91 in classification
- Improved model generalization by applying data augmentation and synthesis techniques to address limited training data
- Deployed the solution as PyQt5 app for real-time shopfloor inspection, increasing on-ground detection accuracy by 20%

TATA iQ (B2B Data Analytics for TATA Group) — Bangalore, India
Machine Learning Intern — May 2024 – July 2024
- Implemented image preprocessing pipelines in live projects at TATA Steel and TATA 1MG, improving model performance
- Built a CycleGAN model for unpaired image-to-image translation, achieving 93% accuracy on synthetic medical imaging

PROJECTS

UCLA DataRes – Research Division — Jan 2025 – Present
- Replicated Double DQN (Minh et al., 2013), training a CNN-based agent on Breakout with stable learning over 1800+ episodes
- Built NBA Finals predictor using XGBoost and LSTM on historical player/team data, achieving 65% accuracy on over/under spreads

Stockify – Stock Portfolio Tracker — Nov 2024 – Dec 2024
- Built a Next.js platform for real-time stock portfolio tracking with live prices, interactive dashboards, and personalized analytics
- Integrated AI insights on risk and diversification using Claude Sonnet and Finnhub APIs for stock data and company metrics
- Deployed to 500+ users, analyzing 10K+ transactions and A/B testing UI features, boosting decision-making speed by 35%

CampusPath – Tour Navigation App — Feb 2024 – March 2024
- Built graph-based routing algorithm using adjacency lists and Dijkstra's algorithm to generate optimal campus tour paths
- Optimized performance through memory-efficient map handling and designed an intuitive UI for student and visitor navigation
- Tested with 100+ simulated users, achieved 95% route accuracy and reduced average tour time by 30% to enhance usability

GTOPro – Poker App — June 2023 – Aug 2023
- Created Python poker app with real-time stats, dynamic bots, and probability engines to enhance user gameplay experience
- Deployed multiplayer game on AWS EC2 for real-time synchronization, smooth UX, and scalable hosting for concurrent users
- Trained ML model to evolve bot strategies, boosting performance 30% over 1K+ simulated games through adaptive gameplay

EXPERIENCE & LEADERSHIP ROLES

Bruin Quant Traders — Los Angeles, CA
Education Director and Quantitative Analyst — Jan 2025 – Present
- Organized internal trading competition, simulating real-time market-making and risk management scenarios for 50+ members
- Designed a holistic curriculum to train members in quantitative finance, strengthening probability, statistics, and trading skills

ADDITIONAL

Technical Skills: Python (Pandas, Tensorflow, Pytorch), C++, Javascript, HTML/CSS, R, SQL, Git, AWS, Linux, Shell Script
Interests: Cricket (leg-spinner), Chess, Poker (new variations), Badminton, Gymming, Tutoring, Cooking, Board games (Catan)