# Suchit Bhayani

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### **EDUCATION**

### University of California San Diego

Bachelor of Science in Data Science, Minor in Mathematics

• GPA: 3.9/4.0

• Relevant Coursework: Deep Learning, Computer Vision, Data Mining, Data Visualization, Probability, Statistics

### **EXPERIENCE**

Nike

June 2025 - Aug. 2025

San Diego, CA

Expected: June 2027

Data and Machine Learning Engineer Intern

- Designed governance frameworks for enterprise ML, generative AI, and BI infrastructure, enforcing compliance
- Implemented model cards in Databricks to improve transparency and governance of deployed ML models
- Engineered workflow leveraging MLflow to automatically flag ethics violations in deployed models
- Scaled a recommender system using PySpark, speeding up product similarity recommendations by 20%

### UC San Diego

Jan. 2025 - June 2025

Teaching Assistant

- Automated grade calculations and imports using pandas and canvas API, reducing manual workload
- Facilitated engaging discussion sections, wrote testing scripts, and created exams to enhance learning outcomes
- ullet Resolved 500+ tickets regarding data structures and algorithms during office hours and on the class forum
- Received a 100% recommendation rate across multiple offerings of various courses, totaling 1000+ students

### UC San Diego Health

Oct. 2024 - June 2025

Machine Learning Researcher

- Engineered and cleaned datasets with pandas to build models to identify and analyze drivers of stem cell renewal
- Conducted regression and correlation analyses using scikit-learn to identify 31 genes for further biological testing
- Performed time series differential gene expression analysis in R to identify biologically significant gene clusters

# Digital Prudentia

June 2024 - Sep. 2024

Data Science and Engineer Intern

- Utilized retrieval-augmented generation (RAG) with Azure OpenAI to develop a skin cancer detection model
- Linked documents with text and image data to the model using Azure AI Search, enabling contextual insights
- Applied prompt engineering and hyperparameter tuning to fine-tune the model and optimize performance

## **PROJECTS**

### Music Recommender System

Full-Stack Development, Software Engineering, Agile Development, REST API, Containerization, MERN Stack

- $\bullet \ \ \text{Built music recommender and analyzer with React, Express/Node.js, and FastAPI, containerized using Docker}$
- Integrated MongoDB, Spotify OAuth 2.0, and managed API communication between frontend, backend, and ML service
- Developed CI/CD pipeline with GitHub Actions to automate testing, building, and deployment across all services

### Personalized AI Health Insights

Big Data, Scalable Systems, Natural Language Processing (NLP), Healthcare AI, Data Engineering

- Developed ETL pipeline in dask to efficiently process and analyze millions of Apple Watch health data points
- Engineered health insight generation pipelines with fine-tuned HuggingFace LLMs, enabling health-specific inferences
- Built an interactive dashboard using plotly to visualize trends, insights, and actionable recommendations

### Accelerating ML with Automated Feature Engineering

AutoML, Large Language Models, Statistical Feature Selection

- Automated an ETL pipeline with OpenRouter API for integrating LLM domain knowledge into the AutoML paradigm
- Validated performance of generated features using XGBoost and RandomForest models across 3 benchmark datasets

### **SKILLS**

- Languages: Python, Java, JavaScript, SQL (PostgreSQL, NoSQL), HTML/CSS
- Libraries: pandas, PySpark, dask, scikit-learn, NumPy, scipy, plotly, seaborn, Matplotlib, BeautifulSoup
- Frameworks: PyTorch, TensorFlow, Keras, React, Express, Node.js, FastAPI
- Tools: AWS (S3, EC2), Azure (DevOps), Docker, Git, GitHub, MLflow, Jupyter, Linux/Unix
- Interests: Gym, nature, music, basketball, football