DHRUV JANI

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Data Scientist with experience in machine learning, statistical modeling, and scalable analytics solutions. Proven ability to translate data into actionable business insights, delivering measurable impact in health tech and supply chain optimization. Adept at building predictive models, optimizing algorithms, and designing data pipelines.

EDUCATION

Columbia University Dec 2024
Master of Operations Research & Analytics
Coursework: Computational Discrete Optimization, Statistical Inference & Modeling, Applied Data Science, Simulation

University of California, Davis June 2023
Bachelor of Mathematical Analytics & Statistics
Coursework: Applied Linear Algebra, Time-Series Analysis, Deep Learning Applications

WORK EXPERIENCE

Laymans Ltd. June 2024 - Present
Data Scientist *New York, NY*

- Engineered LLM-based solutions for client interaction, improving legal document retrieval by 30%.
- Formulated a pricing algorithm leveraging 100+ parameters, increasing financial accuracy by 18%.
- Led advanced statistical modeling initiatives, directly impacting revenue optimization.

New York Genome Center (NYGC) June 2024 - Sep 2024
Computational Research Assistant *New York, NY*

- Built a Python-based tool for 3D imaging analysis, enhancing cross-sectional recovery accuracy for neural data.
- Designed graph algorithms, achieving 70%+ accuracy in neural and transcriptomic data comparisons, advancing genomic research.
- Improved insights at single-cell resolution, aiding neuroscience discoveries.

Apple Inc. June 2022 - Sep 2022
Data Analyst Intern *Mountain View, CA*

- Developed regression models analyzing 60K+ Apple Watch clinical records with 83% predictive accuracy.
- Created data pipelines transforming raw data into actionable insights, driving 15% higher user engagement.
- Identified engagement drivers, presenting actionable insights to senior leadership for product enhancement.

RESEARCH EXPERIENCE

Columbia University Jan 2024 - May 2024
Graduate Research Assistant *New York, NY*

- Preprocessed 10K+ images from Waymo using Google Cloud, enabling 40% faster training of generative driving models.
- Designed scalable pipelines to create unique driving simulations, enhancing dataset diversity.

The National Institutes of Health (NIH) Sep 2023 - Dec 2023
Research Assistant *New York, NY*

- Built Graph Neural Networks with TensorFlow, boosting molecular dataset accuracy by 25%.
- Predicted docking scores for 50K+ compounds, identifying potential drug candidates for targeted development.

ACADEMIC PROJECTS

Route Optimization: Developed a model to predict crime hotspots and dynamically optimize emergency response routes for hospitals using real-time traffic data and integer programming.

Drug Discovery: Achieved a 10% reduction in prediction error by developing a GNN model for molecular binding affinity prediction.

Supply Chain Analytics: Optimized logistics and reduced operational costs by analyzing defect rates, revenue streams, and carrier performance through statistical modeling and interactive dashboards

SKILLS

Programming Languages:	Python, R, SQL, MATLAB, Julia
Libraries & Frameworks:	TensorFlow, PyTorch, Scikit-Learn, NetworkX, Pandas, NumPy, CVXPY, Gurobi, SciPy, Matplotlib
Software Development:	Git, Jupyter, STATA, Power BI, Git, Docker