**Niranjan Kumar Kishore Kumar**

[Oracle Certified](https://catalog-education.oracle.com/pls/certview/sharebadge?id=10962100C1C5493C3D85B76075B231096AE3895D2256E99336D6B593B06767B1) | [Google Cloud Badges](https://www.cloudskillsboost.google/public_profiles/a80da888-f065-4d71-b1e3-68284b662f30) | [Hackathon](https://www.newswire.com/news/2023-uc-berkeley-ai-summit-generative-ai-hackathon-sees-high-schoolers-22166689)

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*New York, NY, USA | (516)-968-6031*

**SUMMARY**

Data scientist with over 2 years of experience in healthcare, specializing in Python, machine learning, and automation. Winner of top honors at the UC Berkeley Generative AI Hackathon, recognized for delivering innovative and impactful solutions.

**WORK EXPERIENCE**

**Machine Learning Research Intern** May 2024 - Aug 2024

*S&P Global | New York City*

* Conducted research on time series models, outperforming ARIMA and LSTM in both accuracy and computational efficiency.
* Developed Python automation scripts for data collection and preprocessing, reducing manual tasks by 30%.
* Enhanced model performance, achieving 4x improvement on the Exchange Rate and 17x on Moody’s Aaa dataset.
* Designed predictive modeling pipelines for financial forecasting, improving model accuracy by 80%.

**Biomedical Data Analyst** Apr 2022 - Dec 2023

*Billroth Hospitals | Chennai*

* Automated data collection from biomedical devices using Python ETL pipelines, improving accuracy by 75% and patient care outcomes.
* Improved data consistency by implementing cleansing and validation processes, reducing errors in reports by 20%.
* Developed data visualizations for healthcare management using Python and Power BI, optimizing resource allocation and reducing costs by 10%.

**EDUCATION**

**Masters Artificial Intelligence:** Katz School of Science and Health, **Yeshiva University** | ***New York*** Aug 2023 - May 2025

**Bachelors Biomedical Engineering:**Rajalakshmi Engineering College, **Anna University | *Chennai***Aug 2017 - May 2021

**PROJECTS**

**Detection of Cardiomegaly in Dogs through CNN’s** [🔗](https://github.com/niranjankumarnk/Project_1-convolutionNN-Dog_Dataset-)

Developed a custom CNN architecture using PyTorch to detect cardiomegaly from dog X-rays, achieving 71% accuracy. Compared the custom model (8 layers) to VGG-16 (16 layers), which achieved 75% accuracy, demonstrating a more efficient architecture.

**Prediction of Vertebral Heart Score (VHS) using Deep Learning** [🔗](https://github.com/niranjankumarnk/VHS_Prediction-using-Deep-Learning)

Customized deep learning models (InceptionV3, ResNet50) for medical image classification, achieving 86.25% accuracy. Outperformed benchmarks of 81.5%, 78.25%, and 84.25% by optimizing model parameters and using advanced image processing techniques for improved performance.

**End-to-End Data Science Project – Breast Cancer**[🔗](https://github.com/niranjankumarnk/BreastcancerType_Prediction)

Developed end-to-end ML pipelines for ingestion, preprocessing, training, and deployment. Implemented CI/CD using AWS and GitHub Actions to automate Docker image deployment on EC2, enhancing scalability, reliability, and continuous delivery of machine learning applications

**Statistics & Machine Learning - Stroke Prediction** [🔗](https://github.com/niranjankumarnk/ML_Stroke_Prediction-)

Implemented ensemble methods to predict stroke occurrence using health parameters and lifestyle factors. Addressed imbalanced data with SMOTE and compared Random Forest and Logistic Regression models, evaluating performance through accuracy, precision, recall, and F1-score metrics.

**SKILLS**

* **Technical Skills:** Python, NLP, Time Series Forecasting, Object Detection & Segmentation,Generative AI
* **Libraries:** NumPy, Pandas, Matplotlib, Seaborn, Scikit-learn, NLTK, PyTorch, TensorFlow, Keras
* **Frameworks:** LangChain. LlamaIndex, HayStack
* **Databases**: MySQL, MongoDB, AstraDB
* **Cloud Platforms**: AWS, Azure, GCP, Oracle
* **Tools & Software Development**: Docker, Kubernetes, MLFlow, Flask, Django, GitHub, Postman, Linux
* **Soft Skills:** Teamwork, Communication, Collaboration, Problem-Solving, Troubleshooting, Creative Thinking