Nitish V.S. Ramakrishnan

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Education

University of Colorado, Boulder, Boulder, CO — Aug 2022 – May 2024
MS in Computer Science — GPA: 3.97/4.00

- **Relevant Coursework:** Machine Learning, Big Data Analytics, Natural Language Processing, Statistical Methods and Applications, Data-center Scale Computing, Computer Vision, Numerical Linear Algebra.

Experience

Software Engineer, InfiCrest Healthcare Inc – San Diego, CA — Aug 2024 – Present

- Architected and deployed a scalable flagship web application using Flask and SQL, leveraging AWS for seamless end-to-end production deployment; driving B2B/B2C growth and projected to **5x** the customer base by 2026.
- Utilized LLMs and computer vision models to assess and mitigate elderly care risks, achieving a **25%** reduction in risk factors during prototype evaluations.

Software Engineer Intern, National Renewable Energy Laboratory (NREL) – CO — July 2023 – Dec 2023

- Led code migration to React.js within a Cordova framework, boosting maintainability and project quality.
- Overhauled code structure, enhancing maintainability and boosting performance by **15%**.

Machine Learning Engineer Intern, Verzeo – Chennai, India — Apr 2021 – May 2021

- Led the ML initiative to enhance data utility and refine a TensorFlow/OpenCV model for aging detection, boosting efficiency by **15%**.
- Engineered and optimized a heart disease prediction model with sklearn and kNN, driving a **20%** improvement in processing speed and predictive performance.

Projects

Scalable Auction System using Google Cloud Platform

- Deployed the platform on Google Cloud using Kubernetes and Docker, optimizing scalability by **15%** and resilience with auto-scalers for dynamic resource allocation during peak loads.

Customer Attrition Forecasting, Banking

- Developed an LSTM-based ML model to predict customer attrition in the banking sector, outperforming similar solutions by **15%**.
- Seamlessly integrated the model into a Flask app, containerized it with Docker, and deployed on AWS ECS using automated pipelines through AWS CodePipeline.

Publications

Supply Chain Logistics Management: An Integration of Automated Machine Learning

- Spearheaded the integration of LightAutoML to predict backorders, driving **97%** ROC AUC score and significantly reducing engineers' monitoring time. (link).

Skills

Machine learning: NumPy, Pandas, SciPy, Scikit-learn, Spacy, NLTK, TensorFlow, PyTorch, Colab, OpenCV
DevOps and cloud: Kubernetes, Docker, AWS, Pytest, GCP, AWS CodePipeline, Terraform, Postman
Backend Development: Python, Java, C/C++, Cordova, Flask, Microservices, SQL/MySQL, Postgres, PHP
Frontend Development: TypeScript, HTML, CSS, JavaScript, ReactJS, RESTful APIs, npm, Figma
Data Visualization: Matplotlib, Seaborn, Tensorboard, Tableau, LucidChart, Key Note
Project Management and Collaboration: agile, user stories and documentation, Jira, A/B Testing