Vrinda (she/her)

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EDUCATION

University of Massachusetts - Amherst *Sep. 2023 - May 2025 (Exp.)*

MS in Computer Science

- GPA: 4.00 / 4.00
- Courses: Advanced NLP, Neural Networks, Machine Learning, Systems for Data Science, Applied Information Retrieval, Statistics

LNM Institute of Information Technology (LNMIIT) *Aug. 2016 - May 2020*

B.Tech in Computer Science Engineering

SKILLS

- **Programming Languages and Frameworks**: Python, C, C++, Java, NumPy, TensorFlow, PyTorch
- **Database and Big Data Technologies**: SQL, Hadoop, Hive, Spark
- **Development Tools and Project Management**: Jenkins, Git, JIRA

EXPERIENCE

LinkedIn | Software Engineer (Site Reliability) *May 2021 - Feb. 2023*

- Optimized management of a massive Big Data ecosystem, comprising 44,000 servers and 1+ exabytes of data to improve scalability and data processing speeds.
- Led the design and development of a project to automate the life cycle of LinkedIn's Big Data servers, resulting in:
  - Robust solution design for seamless server interaction across 100+ services and 10 clusters.
  - Automated addition of petabytes of storage and compute capacity, reducing manual operation time from 4-6 hours to 10-15 minutes, and facilitating rapid scalability.
- Worked on migrating the Hadoop Job History admin service from a bare-metal setup to Kubernetes, ensuring uninterrupted service and enabling automatic failover within 2-3 minutes while reducing hardware dependency.

American Express | Software Engineer *Sep. 2020 - May 2021*

- Overhauled the legacy Mainframe setup while spearheading modernization initiatives leveraging state-of-the-art tools such as ElasticSearch, Grafana, and Jenkins to enhance monitoring, automate operations, and reduce alerts by 40%.

Grab | Software Engineer Intern *Jan. 2020 - Aug. 2020*

- Set up APIs and access layers to improve performance, data security, and bug resiliency in the financial reconciliation frameworks.
- Developed a test automation framework and a configurable mock server for thorough dependency testing and efficient API evaluation to help reduce manual testing by over 60%.

American Express | Software Engineer Intern *May 2019 - Jul. 2019*

- Created Spark scripts to bring down creation time of Big Data tables from 6 hours to 45 minutes while improving resource allocation.

Razorthink Inc. | Software Engineer Intern *Jun. 2018 - Jul. 2018*

- Created a deep-learning-based Intelligent Document Processor to parse and visualize data, allowing clients to efficiently retrieve intricate details from complex documents, cutting down time from several human hours to 1-2 minutes.

PROJECTS

Object Localisation based on Textual Description [Report]

- Pioneered an innovative Object Localization model on the MS COCO dataset comprising over 328,000 images, seamlessly integrating user queries for targeted object highlighting.
- Focused on leveraging the CLIP model to redefine architecture and build a unified model, saw a promising IoU of approximately 0.5, despite limited training resources.

Uncertainty Visualization for Stock Prediction [Report]

- Developed and compared Convolutional, Regular, and LSTM Neural Network architectures to predict closing stock prices of companies like Google and Amazon, using a comprehensive dataset spanning 10 years.
- Used the model with an error rate below 1.5% and used data visualization techniques (scatter plots, line plots, error bars) to better understand the model's performance and allow reliable model comparison and selection by investors.