MEGHANA RABBA

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# EDUCATION

**Illinois Institute of Technology, Chicago, IL** Expected graduation: **May 2026**

* Master of Science, Computer Science | GPA : 4.0 | SEMESTER 2
* Coursework: Software Project management, Science of Programming, Machine Learning, DBO

## JSS Academy of Technical Education December 2020 - May 2024

* Bachelor of Engineering, Computer Science | GPA : 3.9
* Coursework: Mobile Application development, Computer Graphics, UI/UX, Object-Oriented Concepts

# SKILLS

* **Programming Languages:** Python | C | C++ | Java | C# | Dart | Perl
* **Frameworks & Libraries:** TensorFlow | PyTorch | Scikit-learn | NumPy | Pandas | OpenCV | Keras | Hugging Face | MLflow | Lang Graph | Autogen | PCL
* **Concepts:** Object-Oriented Design | Operating Systems | Algorithms | Data Structures | Complexity Analysis | Computer Vision | Deep Learning | Neural Networks | Transformers & LLMs | Natural Language Processing | Reinforcement Learning | Supervised Learning | Unsupervised Learning | Localization | Mapping | SLAM | Concurrency | Real-time Systems | Distributed Systems | Multi-tiered Systems | API Integration | Data Persistence
* **Optimization Mathematics:** Linear Programming | Nonlinear Optimization | Control Theory
* **Cloud Platforms** S3 | Vertex AI | Firebase | Azure
* **Databases:** SQLite | PostgreSQL | MongoDB
* **Tools & Methodologies:** Git | Docker | Kubernetes | Agile | Jupyter Notebooks| Plotly Dash

# PROFESSIONAL EXPERIENCE

## Software Engineering July 2025

## Wells Fargo-Virtual Internship

## Engineered 4-entity data schema using Spring Boot, JPA, and H2, achieving 100% data accuracy

## Reduced data retrieval errors by 25% through scalable Java framework implementation

## Software Engineering May 2025

## Deloitte Technology Job Simulation-Virtual Internship

## Resolved complex algorithmic challenges using Java, achieving 100% test case success.

## Optimized inefficient code solutions through Python refactoring, improving runtime performance by 30%.

## Software Developer Intern March 2023 - May 2024

## AGRI TYPE Research Lab, Bangalore

* Implemented **lightweight TensorFlow ONNX** conversion pipeline, reducing model size by **60%.**

## Accelerated sensor data processing from 500ms to 120ms, enabling real-time agricultural alerts.

# PROJECT PORTFOLIO

## Road Damage Detection Application April - June 2025

## Synthesized a localization system using C++ and Kalman Filters with matrices, vectors, and sensor data buffers managed by Eigen, boosting positional accuracy from 65% to 80%.

## Optimized control logic via C++ std::thread, std::mutex, and message queues for concurrency, achieving 28 Hz update rate and reducing operational errors by 55%.

## AI Powered Language Learning App September - December 2024

## Fine-tuned a mobile app in Flutter integrating ROS Communication and Language Perception models, increasing command understanding by 85%.

## Refined speech-to-text with AWS Transcribe API, reducing input errors by 70%.

## Mental wellness Companion March - April 2024

## Introduced an emotion-aware chatbot app using Deep Learning Models and Cloud Platforms, improving support response time by 70%.

## Modernized sentiment analysis using Transformer models, increasing recommendation accuracy by 75%.

# CERTIFICATES AND ACHIEVEMENTS

* Awarded **First Prize, UNCOMMON HACKS(MLH),** Mar 2025,surpassing 125+ teams.
* Attained **Amazon Web Services(AWS) certification**  recognizing mastery in **Machine Learning Foundation.**
* Earned **Google Cloud Boost Skills Badges** in **Generative AI, LLM, MLOps, Attention Mechanisms.**