# Meena Nagarajan

470-471-6124 | mnagarajan8@gatech.edu | LinkedIn | Github | Atlanta, GA

#### **EDUCATION**

### Georgia Institute of Technology

Atlanta, GA

 $M.S.\ in\ Computer\ Science\ (Specialization:\ Machine\ Learning)$ 

Jan 2024 - Dec 2024

B.S. in Computer Science (Specialization: AI and HCI)

Aug 2021 - Dec 2023

#### EXPERIENCE

### Reframe (Atlanta, GA)

Jul 2025 - Present

Product Engineer - Ultra Team

- Contributed to Reframe's **Ultra coaching platform**, a suite of dashboards that enable coaches to track client health metrics, generate daily plans, manage 1-1 sessions, & monitor outcomes to improve engagement & results.
- Engineered and optimized multiple different dashboards using **React**, **TypeScript**, **React Query**, and **Tailwind CSS**, improving page responsiveness and reducing dashboard load times by 35%.
- Built backend integrations with **NestJS** + **PostgreSQL** and connected services like **AWS S3**, **Stream Video/Chat**, and **Stripe** to support secure data pipelines and enable frictionless coaching workflows.

## L&T Technology Services (Dallas, TX)

Feb 2025 - Jul 2025

Full Stack Development Intern

- Spearheaded modernization of L&T's internal administrative application as a full-stack engineer by integrating Azure AD-based authentication around the existing custom login system to enhance security and prevent vulnerabilities such as phishing, token replay, and unauthorized access; designed and implemented role-based access control from scratch to eliminate shared admin credentials and enforce granular, module-level access.
- Led the database migration from **Oracle SQL** to **PostgreSQL**, collaborated with cross-functional onshore/offshore teams for feature development and troubleshooting, and served as the **primary point of contact** for client support, implementing fixes and enhancements based on user feedback to ensure high availability and satisfaction.

### Siemens Digital Industries Software (Huntsville, AL)

Jan 2023 - Aug 2024

Software Engineering Intern - EDM Infrastructure & Xpedition Layout

- Designed a web-based database management server and orchestrated automated performance tests for 600 concurrent client applications, increasing efficiency by 30%; engineered Python-based solutions for data-driven decision-making and load generator management, boosting load allocation efficiency by 400%.
- Designed and implemented **automated pipelines** enhancing Siemens' PCB design tool for external customers through advanced Python-based automation; developed **ANTLR**-based scripts to automate **1000+** VBScript to Python codebase conversions, optimizing foundational libraries and translating processes for future code branches.

### PROJECTS

American Sign Language Detection Model | Deep Learning, Encoder-Decoder, Transformer models

\* Built a CNN-based encoder-decoder model with OpenPose keypoint extraction and fine-tuned mBART-large-cc25 for ASL-to-gloss prediction, achieving 12.3% accuracy improvement over the baseline.

Disaggregated Large Language Model Scheduling | Python, Simulation, GPU Optimization

\* Implemented a disaggregated scheduler in Vidur with optimized KV cache transfer to decouple prefill and decoding tasks, reducing end-to-end latency by 32% and improving throughput by 16%.

Personalized Music Recommendation System | Python, React, Node.js, Machine Learning

\* Created a personalized music recommendation system using K-means, BIRCH, Agglomerative Clustering, and GMM to cluster 1.2M songs and recommend top-k tracks based on user habits.

#### TECHNICAL SKILLS

Machine Learning & AI: Deep Learning, Computer Vision, Transfer Learning, Model Optimization, Anomaly Detection, Model Evaluation, Feature Engineering

**Programming:** Python, C++, Java, JavaScript/TypeScript, SQL, Bash, Git

Libraries & Frameworks: TensorFlow, PyTorch, Scikit-learn, OpenCV, Pandas, NumPy, Matplotlib, ANTLR

Full-Stack & Web: React, Next.js, NestJS, Vite, React Query, Tailwind CSS, Prisma, Docker

Cloud & Services: AWS (S3, SES, Amplify), Stream Video/Chat API, Stripe, Google APIs (OAuth)

Databases: PostgreSQL, GraphQL, Oracle SQL, MySQL