

Manas Mhasakar

(470) 435-1276 | mmhasakar3@gatech.edu | [manasmhasakar.github.io](https://github.com/manasmhasakar) | linkedin.com/in/manasmhasakar

EDUCATION

Georgia Institute of Technology

Master of Science in Computer Science

August 2024 - May 2026

Atlanta, Georgia, US

Relevant Coursework : Software Analysis and Testing, SAT/SMT Solvers, Tech and Equity

BITS Pilani, India

Bachelor of Engineering in Computer Science

July 2019 - August 2023

Goa, India

Relevant Coursework : Data Structures, Algorithms, Databases, Operating Systems, Object-Oriented Programming, AI

WORK EXPERIENCE

Microsoft Research

Software and Research Fellow

Bengaluru, India

July 2023 - August 2024

- Drove development efforts across multiple LLM use cases and built advanced RAG systems using LlamaIndex, GPT-4.
- Spearheaded backend development for a speech analysis application leveraging LLMs, scaling to over 3000 active users.
- Engineered an orchestrator engine for optimizing LLM call synchronization and improving system efficiency by 35%.
- Developed algorithms enhancing LLM output consistency using iterative few-shot learning, boosting reliability by 25%.

SuperPe

Software Development Intern

Bengaluru, India

January 2023 - June 2023

- Architected a scalable backend architecture for a fintech startup, efficiently handling over 50,000 daily transactions.
- Implemented underwriting for assessing credit risk, reducing default rates by 12% and flagging 15% more high-risk users.
- Migrated vital microservices to FastAPI and optimized data retrieval with DynamoDB, achieving 30% faster lookups.

Dezerv

Backend Development Intern

Bengaluru, India

September 2022 - December 2022

- Designed REST APIs in Golang to interact with MongoDB and Redis for a digital investment management platform.
- Integrated document prefilling, cutting onboarding time by 80% and increasing user retention, boosting growth by 28%.
- Automated account verification and transaction services which eliminated over 30,000 manual validation tasks monthly.

ServiceNow

Software Engineering Intern

Hyderabad, India

May 2022 - July 2022

- Engineered NetSuite integration with MS Teams, optimizing task management and reducing response delays by 40%.
- Automated reporting of project task updates, saving team members 2 hours per week on status and progress tracking.
- Streamlined communication for 100+ users across 5 teams, significantly improving project efficiency and coordination.

PROJECTS & PUBLICATIONS

Kumu Connect | Graduate Research Assistant, Ka Moamoa Lab, Georgia Tech

August 2024 - Present

- Architected a LLM-powered teacher-support web interface to improve curriculum creation for 5 native Hawaiian schools.
- Enabled teachers to quickly design grade-specific and culturally relevant lessons, saving them up to 20 hours per month.

Comuniqa | Exploring LLMs for Improving Speaking Skills

September 2023 - December 2023

- Conducted user studies with over 60 students for Comuniqa, a novel LLM-based system for enhancing English speech.
- Published findings and presented them at the 7th ACM SIGCHI COMPASS 2024 conference.

[Paper Link](#)

Auto-Evaluation of Programs | BITS Pilani, Goa

August 2022 - May 2023

- Automated evaluation for programming labs for 800 students using symbolic execution and bounded model checking.
- Enhanced accuracy and efficiency of evaluations, reducing time taken by TAs from hours to less than 5 minutes.

TECHNICAL SKILLS

Programming Languages: Python, Java, C, C++, JavaScript, Typescript, Golang, HTML/CSS, Bash, SQL

Databases: MySQL, PostgreSQL, MongoDB, Redis, Neo4j, Azure Cosmos DB, Amazon RDS, DynamoDB

Frameworks: Flask, Django, FastAPI, Gin, React.js, Express.js, Bootstrap, Node.js, ES6, Redux, LlamaIndex

Cloud and Development Tools: Azure, AWS, GCP, Docker, Kubernetes, Git, CI/CD, Linux