

Jinendra Malekar

(803) 633-5670 | jinendramalekar@gmail.com | [linkedin.com/in/jinendramalekar](https://www.linkedin.com/in/jinendramalekar) | [jinu98.github.io/](https://github.com/jinu98) | github.com/jinu98

Education

University of South Carolina College of Engineering and Computing

Columbia, SC

Master of Science: Computer Science

Expected May 2025

Major GPA: 3.75/4.0

Relevant Coursework: Analysis of Algorithmic, Edge and Neuromorphic Computing, Advanced Topics in Neuro-symbolic AI, Compiler Construction, Network Systems Security

Technical Skills

Languages/Frameworks: Java, JavaScript, C++, Python, HTML, CSS, React.js, Next.js, React Native, Bash, Node.js, Flask, Express.js

Others: MongoDB, AWS, SQL, Git, Nginx, Firebase, Postman, Bootstrap, RESTful API, FAST API

Professional Experience

Artificial Intelligence Institute at University of South Carolina

Columbia, SC

Graduate Research Assistant (Research Advisor: [Dr. Amit Sheth](#))

August 2023 - Present

- Designed and implemented a comprehensive full-stack application to create and merge diverse knowledge graphs, facilitating the integration of various knowledge bases on the internet and supporting knowledge discovery
- Created a web-based real-time application for monitoring and annotating high-risk suicidality-related posts on Reddit, achieving a remarkable **90%** reduction in evaluation time and an accuracy rate exceeding **85%** for annotating posts
- Invested over **450** hours in conducting research on Language Models and mental health, leading to the development and execution of functional research projects resulted in the submission of **2** papers currently under review at prestigious AI conferences

Research Specialist

July 2022 – August 2022

- Developed a mobile app for **Prisma Health**, enhancing monitoring for **15** type-1 diabetic patients and with an intuitive interface, achieving a **20%** increase in patient engagement for daily carbohydrate tracking of patients for insulin management
- Collaborated on a customized dashboard with **BMW Greenville/Fraunhofer** material planners, improving data accessibility and efficiency by **25%**, migrated the backend database from MongoDB to Redis achieving a **30%** performance boost
- Focused on disaster management, built an interactive dashboard that improved shelter and medical assistance access during calamities utilizing real-time Twitter data, achieving a notable 40% boost in disaster response efficiency
- Devoted **900+** hours researching Language Models integration with mental health, working on impactful research projects resulted in the publication of two papers in prestigious AI conferences

Software Developer

Delhi, India

Krya Innovations Pvt. Ltd

July 2021 – June 2022

- Oversaw consumer-facing components of the 'rippi' web app on the Next.js framework, delivering new features and enhancing capabilities, resulting in a 20% increase in user engagement
- Collaborated with the design team to create a comprehensive front-end website using React.js, contributing to a 15% expansion in the product's reach and usability, fostering increased user engagement and satisfaction

Projects

Suicidality Diagnosis of Online Reddit Data| [Demo](#)

Pytorch | Flask | Reactjs

- Built a web application using advanced natural language processing having accuracy of **85%** to track suicidal posts on Reddit
- Improved algorithm efficiency by 50%, improving the prediction of suicidality-related concepts in text, and reduced system latency to an impressive 0.8 seconds per sentence for real-time monitoring

Prisma Health Mdiabetes App| [Demo](#)

React native | MongoDB | Node.js | Flask

- Developed a thorough mobile application for Prisma Health to assist in monitoring individuals with type-1 diabetes.
- Designed an intuitive interface enabling patients to effectively manage insulin levels by tracking daily carbohydrate intake, highlighting expertise in healthcare data management and patient support solutions

BMW Dashboard for Greenville/Fraunhofer| [Demo](#)

AWS | React.js | MongoDB | Fast API

- Worked with BMW Greenville/Fraunhofer material planners to create a tailored dashboard, achieving a 30% productivity boost
- Led the development of the dashboard's React.js front end and coded a robust Python-based backend for enhanced performance and **25%** efficiency during the project's initial phase

Disaster Record| [Demo](#)

Python | React | Flask | Tensorflow

- Emphasized disaster management by creating an interactive dashboard for crucial information during natural calamities
- Created a tool for shelter location and medical aid during disasters, achieving a 40% improvement in response efficiency.

Publications

- Kaushik Roy, Yuxin Zi, Manas Gaur, Jinendra Malekar, Qi Zhang, Vignesh Narayanan, Amit Sheth, "Process Knowledge-infused Learning for Clinician-friendly Explanations" June 2023. AAAI Second Symposium on Human Partnership with Medical Artificial Intelligence [\[paper\]](#)
- K. Roy, V. Khandelwal, R. Goswami, N. Dolbir, J. Malekar, and A. Sheth, "Demo Alleviate: Demonstrating Artificial Intelligence Enabled Virtual Assistance for Telehealth: The Mental Health Case" Oct 2022, Accessed on 12/09/2022. [Online] Proceedings of the AAAI Conference on Artificial Intelligence [\[paper\]](#) [\[demo\]](#)