

KANDI VISHNU VARDHAN REDDY

Contact No: +1 (979) 985-1962

vkandi@umass.edu

Github: <https://github.com/Vishnu0196>

EDUCATION

- University of Massachusetts Amherst** Sep 2024 - Present
MS in Computer Science | Key Courses - Systems Design, Neural Networks, RL
GPA: 4/4
- Indian Institute Of Technology, Kharagpur** July 2018- July 2023
B.tech, M.tech in Computer Science and Engineering
CGPA: 8/10

TECHNICAL SKILLS

Programming Languages: C | C++ | C# | Python | JavaScript | HTML | React | Java | Go | PHP | Ruby | TypeScript
Tools, Technologies, Environments and Libraries: Android and Web Development | Git | gRPC | Shell | REST API | Amazon S3 | SQL | Vivado | Wireshark | Bootstrap | DataDog | Azure DevOps | SSMS | Node.js | MATLAB | OpenCV | Git | PyTorch | TensorFlow

INDUSTRY EXPERIENCE

- Optym India Private Limited | Software Engineer - Backend and Systems** Jul'23 - Aug'24
Technologies: JavaScript, TypeScript, c#, DataDog, Azure DevOps, SSMS, Node.js
- Engineered and maintained high-performance **backend systems** for logistics, enhancing **decision-making processes** for trucking and driving efficiency gains.
 - Designed and implemented **scalable algorithms** and **RESTful APIs** to tackle complex logistics challenges, boosting **operational efficiency** and significantly increasing Optym's system reliability.
 - Partnered with cross-functional teams to integrate **cloud-based infrastructure** and **data pipelines**, delivering scalable **backend solutions** that adapted to business growth and met evolving logistics demands.

- Cohesity India Private Limited | Software Engineer Intern** May'22 - Jul'22
Technologies: Python, GO, gRPC, Amazon S3
- Engineered a **gRPC streaming** solution for efficient **large-scale data transfers** across client clusters, enhancing the existing **ETL** processes. Performed a comparative analysis of server memory usage and data transmission times to evaluate the efficacy of the implemented streaming methods.
 - Researched and developed **data segmentation** strategies, utilizing storage solutions like **S3** to reduce gRPC stream loading times and **improve throughput**.

RESEARCH EXPERIENCE

- Enhancing Biomedical Article Summarization | IIT Kharagpur** Aug'22 - Dec'22
- Conducted in-depth research on advanced **NLP techniques**, with a focus on automating the summarization of **biomedical articles**.
 - Integrated **BioBERT** with **TextRank** for salient feature extraction and employed **Pegasus-PubMed** for summarization to automate the generation of succinct biomedical research abstracts.
- Privacy Breach in Deep Learning through Computer Architecture | IIT Kharagpur** Feb'20 - Nov'21
- Conducted research on information leakage vulnerabilities in **deep learning systems**, identifying **architectural footprints** and inadvertent memorization of data sequences during model training as key risks.
 - Explored and demonstrated **side-channel attacks**, with a focus on **cache-based** leakage, revealing how adversaries could exploit deep learning models to access sensitive information.

KEY PROJECTS

- Spotify Playlist Recommendation System | UMASS Amherst** Aug'24 - Dec'24
- Converted the million-playlist dataset and leveraged **PySpark** for data cleaning/EDA.
 - Applied **ALS-based** collaborative filtering with tuned parameters to produce top-100 music suggestions.
 - Developed an API to facilitate seamless integration and real-time music recommendations.
- Lunch Planner App | Software Engineering Lab** Jan'20 - May'20
- Designed an Android application that utilizes the ZOMATO API and the Google Play Services location API to provide customised restaurant recommendations based on the user's location proximity and user-selected criteria (such as distance, type of cuisine, category, rating).
- Grocery Door app | Database Management System Lab** Jan'21 - May'21
- Engineered an **E-commerce Android application** using **Java** and a web counterpart using **PHP**, focused on **real-time database** integration for efficient delivery of grocery items, home essentials, and food supplies, enhancing client convenience and operational efficiency.
- Campus Connect App | Full Stack Development Project** Jan'23 - May'23
- Built an **Android and Web application** to streamline campus event management, providing efficient notifications for students.
 - Leveraged **Java, React, Node.js**, and **Firebase** for seamless cross-platform communication and **real-time data synchronization**.

TEACHING EXPERIENCE

- Teaching Assistant | Indian Institute of Technology, Kharagpur** Autumn'22- Spring'23
- Conducted **office hours** and provided assistance during lab sessions, along with organizing and evaluating assignments for the **Compilers Laboratory** and **Programming and Data Structures Laboratory** courses.