Rajesh Kumar Reddy Avula

+1 9303334205 | avula.rajesh.kumar.reddy@gmail.com | https://www.linkedin.com/in/rajeshkumar112k

EDUCATION

Indiana University Bloomington   Bloomington, IN
Master of Science in Computer Science, **CGPA: 3.86/4.00**   *May 2025*

B.M.S Institute of Technology and Management   Bengaluru, India
Bachelor of Science in Information Science and Engineering **CGPA: 8.51/10.00**   *Aug 2021*

EXPERIENCE

Graduate Research Assistant   Jan 2025–Present
Indiana University Bloomington   *Bloomington, IN*
- Loaded and benchmarked large-scale graph datasets (Amazon Product Graph) using Neo4j, GraphFrames, TigerGraph, and PuppyGraph.
- Designed and executed graph queries and analytics tasks across platforms, collecting and analyzing performance metrics.
- Trained deep learning models (GeoAI) by labeling and processing 10,000+ data samples. Trained and fine-tuned deep learning models, accelerating annotation speed by 25%.

Graduate Teaching Assistant   Sept 2024–May 2025
Indiana University Bloomington   *Bloomington, IN*
- Led 20+ lab sessions on Software Engineering with focus on React, component-based architecture, and client-server principles.
- Mentored 100+ students by troubleshooting React.js component architecture, improving app load speeds by 15–20%.

Software Engineer   Aug 2021–June 2023
Oracle   *Bengaluru, India*
- Engineered and maintained scalable backend services and APIs using Java and RESTful architecture, enhancing data processing and integration within Oracle Marketing Cloud (OMC).
- Architected and scaled SaaS marketing solutions using OMC. Optimized email initiatives by analyzing 5,000+ data points to improve campaign performance metrics (e.g., open rates, CTR).
- Collaborated with UX designers to develop and optimize user interfaces for campaign management tools. Implemented A/B Testing, STO, and multivariate testing with strong attention to usability, accessibility, and mobile responsiveness.
- Orchestrated timelines, drove milestones, and delivered solutions under tight deadlines while facilitating client services. Used Git, RESTful APIs, and client-focused service delivery in fast-paced product environments.

Software Engineer Intern   Jan 2021–May 2021
Evertz   *Bengaluru, India*
- Developed frontend modules using Vue.js, improving page load times by 20% through component optimization.
- Implemented object-oriented UI design across multiple views, increasing code reusability by 30%.
- Acquired domain expertise in broadcasting concepts through working on the company website.

PROJECTS

Recipe Book App (Savory Stories) | *React Native, Firebase, Firestore, Expo, Camera API*   Aug 2024–Dec 2024
- Built a cross-platform (iOS/Android) mobile app using React Native and Firebase for recipe browsing and submission with camera upload, authentication, and personalized filters.
- Integrated Spoonacular REST API, managed app-wide state, enforced accessibility, and maintained version control via Git.

Reddit Comments to Post Relevance Analysis | *Python, LDA, LSTM, GPT, BERT,*   Jan 2024–May 2024
- Designed and trained a relevance classification system for Reddit comments (scale 1–5), using TF-IDF embeddings and custom metrics based on user engagement, semantic similarity, polarity, and cluster coherence.
- Preprocessed large-scale Reddit data by removing noise (e.g., irrelevant comments, URLs, emojis, special characters) to ensure clean input for accurate relevance scoring.

Apartments Management System (Rentr) | *React, MongoDB, Netlify, Git*   Aug 2023–Dec 2023
- Developed and deployed a cloud-hosted rental listing app with clean, user-centric UI/UX for property search and chat features over 200 test users. Implemented secure third-party authentication, mobile-first design, and responsive components using Material UI.
- Applied SASS, responsive layout techniques, and modular React components for a clean UI. Built using HTML, CSS, JavaScript, React, Node.js, and MongoDB to streamline property searches and enhance user experience.

TECHNICAL SKILLS

Languages: Java, Python, C/C++, SQL (PostgreSQL), JavaScript, Kotlin, Swift, HTML/CSS, R
Frameworks and Libraries: React, Node.js, Vue.js, JUnit, WordPress, Material UI, pandas, NumPy, Matplotlib
Developer Tools: Git, Docker, Google Cloud Platform, Visual Studio, PyCharm, Eclipse, Android Studio, Xcode, Oracle Responsys, Postman, Adobe Photoshop, Dreamweaver, Netlify, MongoDB, Microsoft Excel, Power BI
Certifications: AWS Certified Developer-Associate, Oracle Java SE 8 Associate Programmer, Oracle Database SQL Certified Associate, Oracle Responsys Marketing Platform, Java Explorer Badge