LOKESH RENGARAJU

Portfolio | **LinkedIn** | 858-319-5663 | lokeshrengaraju21@gmail.com | GitHub | Leetcode | San Diego, California

Summary

Aspiring Software Developer with 2 years of experience in creating and improving software applications. Proficient in Backend Development and Machine Learning. Known for collaborating seamlessly within Agile teams to deliver scalable, high-performance solutions that meet user needs and business goals. Skilled in developing robust, user-friendly applications and driving continuous improvement in software functionality.

Education

Master of Science in Computer Science   **San Diego State University**   *San Diego, CA, USA*   **(08/2022 - 05/2024)**
CGPA: 3.87/4

- Coursework: *Modern Full-stack Web Development, Theory of Parallel Algorithms, Machine Learning, Advanced Multimedia Networks, Algorithm Analysis and Design, Principles and Techniques of Data Science, Advanced Object-Oriented Programming & Design Patterns.*

Bachelor of Engineering in Computer   **Anna University**   *Chennai, TN, India*   **(08/2018 - 05/2022)**
Science - CGPA: 8.44/10

- Coursework: *Cloud Computing and Security, Big Data Analytics, Artificial Intelligence, Computer Architecture, Theory of Computation, Operating Systems, Cryptography and Network security, Data Warehousing and Data Mining, Distributed Systems.*

Experience

Research Assistant   **AI4Business Lab, SDSU Research Foundation**   *San Diego*   **(05/2024 - Present)**

- Designed and implemented a modular Medical Question-Answering system integrating **NLP**, **BERT** models, and Knowledge Graphs, achieving a 90% accuracy rate on benchmark medical QA datasets and reducing query processing time by 35%.
- Enhanced system scalability and adaptability by developing **query preprocessing**, semantic search, and domain-specific knowledge representation, improving response relevance by 20% as measured by user feedback analysis.

Software Engineer Intern   **Shiash Info Solutions Private Limited**   *Chennai, India*   **(05/2020 - 05/2021)**

- Collaborated in a 15-member **Agile team** to develop scalable software, implemented continuous Integration/continuous deployment **(CI/CD) pipelines**, and reduced deployment time by 50%.
- Optimized **SQL** queries using indexing, partitioning, and query execution plan analysis, resulting in a 40% reduction in data retrieval time and improving overall **database** performance by 35%.
- Engineered a high-performance chatbot using Python, **Flask**, and **NLP** libraries, integrating **RESTful APIs** for real-time communication, which improved website response time by 30% and boosted user engagement by 25%.

Projects

- **Employee Management System**   **(08/2023)**
  - ❖ Developed a full-stack web application for employee management using **React.js** and Bootstrap for the frontend, and **Node.js** for the backend, implementing CRUD operations for employee data and performance tracking.
  - ❖ Designed an intuitive UI and secure architecture, conducting thorough UI and API testing, resulting in efficient management of 1000+ employee records stored in **MongoDB** with optimized performance.

- **Job Portal using Spring Boot**   **(01/2023)**
  - ❖ Designed and implemented a full-stack Job Portal using **Java**, Spring Boot, and **React**, serving over 10,000 users monthly. Enhanced job match accuracy by 45% through advanced search features and implemented secure file storage with **AWS S3**. Responsive design improvements led to a 30% increase in mobile retention and, enhancing user engagement by 40%.

- **To-Do API Integration Testing**   **(01/2024)**
  - ❖ Developed a **Python** script to automate integration testing for a RESTful To-Do API using the requests library, testing core functionalities like task creation, updating, listing, and deletion.
  - ❖ Implemented **test cases** for end-to-end API validation, ensuring reliable task management operations and improving API response accuracy by 20%.

Skills

- **Programming Language:**   *Python, C, Java, C++, JavaScript, SQL.*
- **Databases & Cloud:**   *MySQL, MongoDB, PostgreSQL, AWS (Lambda, EC2, S3), Azure, Databricks.*
- **Web Technologies**:   *Node.js, React, HTML, CSS, Spring Boot, Django, RESTful API, TypeScript, Angular.*
- **Development Tools & OS:**   *Git, Agile, Docker, Kubernetes, Red Hat, Linux.*
- **ML Framework:**   *Pandas, NumPy, Scikit-learn, PyTorch, PyTest.*

Certificate

- **Advanced Certificate in Web and Mobile Applications Development** from San Diego State University Global Campus.   **(05/2024)**
- **Red Hat Certified System Administrator**: Credential ID 200-029-049   **(08/2020)**
- **CCNA Routing and Switching: Introduction to Networks (NetAcad)**   **(05/2021)**