

RITHESH ASANTHULA

📞 7981991406 ✉ asanthularithesh@gmail.com 🔗 [linkedin.com/in/rithesh-asanthula](https://www.linkedin.com/in/rithesh-asanthula) 🐙 github.com/rithesh10 </>
leetcode.com/rithesh10 🌐 [portfolio](#)

About Me

- Computer Science undergraduate with practical experience in full-stack development using Java, Python, JavaScript, React.js, Node.js, and SQL. Passionate about building scalable, user-centered applications—ranging from GenAI-powered tools to real-world productivity solutions. Familiar with Docker , currently expanding knowledge in AWS and cloud technologies. Strong problem-solving and collaboration skills, eager to grow in dynamic, fast-paced environments.

Technical Skills

Languages: Java, JavaScript

Web Development: Node.js, Express.js, Flask, React.js, Tailwind, HTML, CSS

Databases: MySQL, MongoDB

Tools and Platforms: Git, GitHub, GitHub Actions, Linux, Docker, Kubernetes, Postman

Others: Full Stack Development, Data Structures and Algorithms, Problem Solving, Database Management Systems

Education

Keshav Memorial Institute of Technology, Hyderabad

November 2022 - Present

Bachelor of Science in Computer Science

9.1 CGPA

Sri Chaitanya Junior College, Hyderabad

2020 - 2022

Maths, Physics, Chemistry MPC

94 percent

Carmel Convent High School, Mancherial

2019 - 2020

Secondary School Certificate (SSC)

10 GPA

Projects

GenAI-Based Workout Assistant | *MERN, OpenCV, LLM*

Jan 2025

- Built a full-stack web application using the MERN stack to generate personalized workout and diet plans.
- Integrated a fine-tuned Large Language Model (LLM) to recommend customized routines based on user goals and preferences.
- Implemented a smart diet recommendation engine that considers fitness objectives, dietary habits, and budget constraints.
- Designed a dashboard to track user progress, log workouts, and monitor diet adherence.
- Used cookies for secure authentication and authorization of users.
- Stored labeled exercise images and descriptions in MongoDB for dynamic frontend visualization.
- Deployed the application using GitHub for version control and continuous development.
- 🐙 github.com/rithesh10/workout2

ATS-Based Resume Parser | *Python, NLP, Flask, Sentence Transformers, MongoDB*


Mar 2025

- Developed an NLP-based resume parser to extract structured information like contact details, skills, and experience.
- Used Named Entity Recognition (NER) for accurate data segmentation from resumes.
- Applied Sentence Transformers and cosine similarity to match resumes with job descriptions using semantic search.
- Stored parsed data in MongoDB and presented ATS compatibility scores through a user-friendly dashboard.
- Fine-tuned NLP models to enhance information extraction and semantic understanding.
- 🐙 github.com/rithesh10/ResumeProject

Mental Health Assessment Website | *MERN, Machine Learning*


Jan 2024

- Built a MERN-based web platform for mental health assessments using survey data.
- Integrated machine learning models to classify users into depression, anxiety, and stress categories.

- Generated real-time, personalized recommendations based on classification results.
- Designed a rule-based alert system to notify educators when responses indicate severe mental health risks.
-  github.com/rithesh10/ps

CI/CD Pipeline Demo Project | *Docker, GitHub Actions, AWS EC2*

Apr 2025

- Developed and containerized a sample Node.js API using Docker for streamlined deployment.
- Configured a CI/CD pipeline with GitHub Actions to automate deployment workflows.
- Deployed the Dockerized application on an AWS EC2 instance and monitored logs and uptime.
-  github.com/rithesh10/DockerGithub

Achievements

- **LeetCode:** Solved 400+ problems, with a focus on algorithms such as *Backtracking*, *Graphs*, and *Binary Search*