

M P AKASH

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Education

R.V. College Of Engineering

BE in Computer Science and Engineering

Dec. 2021 – Current

CGPA-8.40

Experience

IEEE Computer Society, bangalore | Python, OpenCV, Image Processing

July 2022 - August 2022

- Completed UdeMy course on **computer vision**, gaining understanding of image processing, object detection and classification using popular libraries and frameworks.
- Explored the fundamentals of **image formation**, such as light physics, camera and sensor characteristics, to understand how visual information is encoded in digital images.

Internship | Python-Flask, MySQL, JS, CSS

June 2022 - Dec 2022

- Developed a web-based application for students performance analyser system for the department of CS.
- The application is developed using the **Python-Flask** as backend along with the MySQL for data storage.

Research Publications

Real-time Insights and Visualizations for Unprecedented Impact in Ball Badminton

- ISBN: 978-93-5877-507-5

Sept 2023 - Oct 2023

- Developed user-friendly web-app for the **real-time** analysis and display of ball badminton sports.
- Analysis involves tracking of the movements, similarly ball tracking, court boundary detection using **CV algorithms** along with display of matches played and live match score with win probability.
- Recent Technologies like ReactJS, Python-Flask API, OpenCV framework, firebase-realtime database was utilized.

Projects

AI application for patent Search | RAG-LLM, MistralAi, langchain

Jan 2024 - March 2024

- Developed a user-friendly web application for efficient patent retrieval using ReactJS, Python-Flask and web-scraping.
- RAG-LLM framework** was used along with Python to build AI for retrieval.

Hotel Management System | ReactJS, Python, MySQL, MongoDB

Jan 2024 - March 2024

- Developed a stand-alone website using frontend with **ReactJS** and backend using **Python-Flask** for booking hotels, eliminating the need to visit individual hotel sites.
- Utilized **MySQL and MongoDB** for data management and user registration.
- Incorporated **sentiment analysis** for rating hotels based on user reviews using **NLP** techniques.

HostelHelpHub | Flask, Firebase, CSS, ReactJS

December 2023 - March 2023

- Developed and deployed a web application for hostel students to register and track issues faced in the hostel.
- Implemented an admin interface for wardens to log in and resolve reported issues.
- Utilized **Python-Flask** for the backend, **ReactJS** for the frontend, and **Firebase Realtime Database** for data storage.

Technical Skills

Languages: C, CPP, Python, JavaScript, MySQL

Developer Tools: Git, VS Code, Jupyter-Notebook, Linux

Technologies/Framework: Flask, MySQL, MongoDB, firebase, Spark, Kafka

Achievements

- Head of Research vertical in astronomy club Team dhRuVa, RVCE.
- Solved 420+ leetcode questions.