YUGAL SAINI

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Education

Bachelor of Technology in Computer Science

Nov 2021 – May 2025

Rajasthan Technical University, Kota, Rajasthan

CGPA: 8.87

Relevant Coursework: Data Structures, Algorithms, Cloud Computing, Database Management, Operating Systems

Experience

Full-Stack Developer Intern

May 2024 – June 2024

Dooper Health Technology Pvt Ltd, Kota, Rajasthan

- \bullet Developed and deployed scalable MERN stack web applications with real-time notifications, improving user engagement by 40%.
- Optimized MongoDB queries, reducing response time by 25%.
- Collaborated in Agile teams through daily stand-ups, code reviews, and UI/UX enhancements.

NLP Summer Trainee

Jun 2024 - Jul 2024

Oil and Natural Gas Corporation (ONGC), Dehradun, Uttarakhand

- Built an NLP-based document summarization tool using Python, SpaCy, and Transformer models, reducing manual summarization time by 50%.
- Integrated the Fitz library for PDF parsing, enhancing data retrieval efficiency.

Projects

Artificial Magnetic Force Algorithm (AMFA)

(GitHub)

- Developed a novel nature-inspired optimization algorithm (AMFA) using Python, achieving a computational complexity of O(N log N), 2.4x faster than traditional methods like GSA (1.2s vs. 0.5s per iteration).
- Evaluated AMFA on 20 benchmark functions, outperforming 5 established algorithms on unimodal tasks (e.g., Sphere fitness -0.01) and documented findings in LaTeX using the IEEEtran template for publication.

Cloud Framework for Student Activity Center

(GitHub)

- Developing a SaaS platform using React, Bun js, and AWS to manage student roles, events, and resources.
- Implementing role based access control for 10+ user categories.

Facial Recognition Attendance System

(GitHub)

- Developed a cloud-based attendance system using AWS Rekognition, Lambda, and DynamoDB for 500+ students.
- Reduced manual effort by 70% and achieved 95% accuracy in real-time face detection.

Certifications & Awards

- AWS Cloud Training LinuxWorld Informatics
- \bullet AWS Cloud Technical Essentials EdX
- Python Basics for Data Science EdX
- AWS Cloud with AI LinuxWorld Informatics
- English for Personal and Professional Development IIIT Kota
- 1st Rank, SQL Quiz Competition GFG Student Chapter RTU Kota

Technical Skills

- Programming: Java, JavaScript (Node.js, React.js), Python
- Cloud & DevOps: AWS (EC2, S3, Lambda, DynamoDB), Docker
- Databases: DynamoDB, MongoDB, SQL, Redis
- Web Development: MERN Stack, REST APIs, HTML, CSS
- Tools: Linux (Ubuntu), Git, Agile/Scrum, CI/CD
- Concepts: OOPs, Distributed Systems, SDLC

Key Strengths

- Problem-Solving: Proficient in Data Structures and Algorithms (300+ problems solved on LeetCode, GeeksfGeeks and Hackerrank).
- Agile Collaboration: Experienced in sprint planning, Slack, and CI/CD.
- Quick Learner: Built 5+ projects across cloud, web development, and NLP within one year.