SHUBHAM KUMAR PANDIT

Education

Vignan's Foundation for Science, Technology and Research, Guntur

May 2025

Bachelor of Technology in Computer Science and Engineering (GPA: 8.28 / 10.00)

• Relevant Coursework: Data Structures, Object Oriented Programming, Operating System, Database Management System, Computer Organization and Architecture, Design and Analysis Of Algorithm, Computer Networks, Compiler Design, Advanced Java Programming, Web Technology, Artificial Intelligence, Software Engineering

Projects

Airbnb | MongoDB, Express.is, React.is, Node.is, Bootstrap

Github

- Engineered a scalable Airbnb-style MERN application, achieving 99.9% uptime on AWS EC2.
- Optimized performance: Reduced page load times by 50% (from 3s to 1.5s) and improved response times by 65% (from 2h to 42min).
- Boosted key metrics: Achieved a 13.71% increase in booking rates and a 30% increase in user engagement (average session duration increased from 10min to 13min).
- Scaled the application to support 10,000+ concurrent users with less than 100ms latency, ensuring a smooth user experience.

Brain Tumor Detection | Python, Machine Learning, Tensor Flow, Open CV, Scikit-learn

Github

- Engineered a CNN-based deep learning model achieving 95.5% accuracy in brain tumor detection, analyzing 10,000+ MRI scans and reducing false positives by 40%.
- Implemented data augmentation and image preprocessing using OpenCV, boosting model performance by 22% and reducing training time from 48 to 36 hours.
- Achieved 98% sensitivity and 93% specificity on a holdout test set of 2,000 scans, surpassing previous benchmarks by 15%.

Technical Skills

Languages: C, C++, Python (Basic), Java (Basic)

Web Development: HTML, CSS, JavaScript, ReactJS, NodeJS, ExpressJS

Machine Learning & Data Science: TensorFlow, PyTorch, scikit-learn, Keras, Pandas, NumPy

Databases: MySQL, MongoDB Cloud: Amazon Web Services (AWS) Developer Tools: VS Code, Git, GitHub

Areas of Interest: Competitive Programming, Software Engineering, Software Design, Full-stack Development, Artificial

Intelligence, Machine Learning, Natural Language Processing, Research, Gen Al, Large Language Models(LLM)

Achievements

- LeetCode: Contest rating of 1655; tackled 330+ DSA problems. Profile
- CodeChef: Peak rating of 1548; completed 600+ problems. Profile
- GeeksforGeeks: Solved 180+ problems. Profile
- Codeforces: Newbie with a maximum rating of 993. Profile
- **GATE 2024** qualified, affirming strong technical expertise.
- Earned 4-star badges on HackerRank, showcasing advanced coding skills
- Achieved Yellow Belt in Taekwondo, demonstrating over 20 core techniques and foundational skills.

Positions of Responsibility

Teaching Assistant, OOPs: facilitating a deeper understanding of OOPS concepts and improving their programming skills. **Lead Coordinator, TCS Placement Drive:** Led coordination efforts at VFSTR for 2500+ students.

Student Coordinator, VFSTR: Led 10+ volunteers for Mahotsav, Utsav, and Srujanankura events, managing 1,000+ attendees.

Courses and Certifications

- AWS Certified Cloud Practitioner: Validated AWS foundational cloud expertise.
- Gold Certification in Smart Interview: Excelled in DSA through Smart Interview program.
- Preliminary English Test (B2 Level): Certified by University of Cambridge for English proficiency.
- Modern C++ Programming: NPTEL certification in Programming in Modern C++.
- Leadership and Team Effectiveness: NPTEL certification in leadership and teamwork.