S Jaya Pradeep

+91 8870282873 | s.jayapradeep7@gmail.com | Bhopal, Madhya Pradesh, India
LinkedIn | GitHub

Professional Summary

Computer Science student specializing in AI/ML and full-stack development, with strong background in building scalable systems, cloud deployment, and software testing. Experienced in engineering distributed applications, deploying on AWS, and collaborating in agile teams to deliver robust, high-impact solutions.

Education

Vellore Institute of Technology, Bhopal **2023 – 2027**
B.Tech, Computer Science & Engineering (AIML) *CGPA: 8.94 / 10*

- Relevant Courses: Data Structures, Object-Oriented Programming, Operating Systems, Machine Learning, Computer Networks, Database Management Systems, AWS Cloud

Work Experience

AlgoUniversity (Y-Combinator backed) **May 2024 – Present**
Software Development Intern *Remote*

- Engineered **MyOJ**, a Django-based online judge serving 500+ active users and 800+ submissions weekly
- Optimized code execution environment to 1.9s using Docker sandboxing and load testing; improved efficiency by 35%
- Implemented robust testing frameworks for contest scoring systems and real-time leaderboards, ensuring 0 critical failures in production
- Deployed full-stack platform on AWS EC2 with CI/CD pipelines, achieving 99.9% uptime and automated monitoring

amasQIS.ai **Apr 2024 – Present**
AI Engineer Intern *Remote*

- Enhanced YOLO model accuracy by 17% by optimizing feature engineering and validation pipelines
- Collaborated across 4+ teams to design deployment and testing protocols for end-to-end AI systems
- Built predictive maintenance system achieving 92% detection accuracy and 99.8% reliability on industrial datasets
- Integrated ML workflows with cloud infrastructure (AWS S3, EC2) and automated monitoring pipelines

Technical Projects

AI-Powered Mentor-Mentee Platform (Python, Django, ML) GitHub

- Developed ML-based matching system for 150+ students; achieved 95%+ accuracy through unit and integration testing (95% code coverage)

MyOJ - Online Judge Platform (Django, Docker, PostgreSQL, AWS) GitHub

- Built scalable code execution platform with sandboxing, security testing, and automated validation pipelines

Heart Disease Detection System (Python, Scikit-learn, Pandas) Colab

- Achieved 95%+ accuracy through cross-validation and automated performance monitoring

Hand Sign Translation System (Python, OpenCV, CNN, TensorFlow) GitHub

- Built real-time CV system with 95%+ precision at 24 FPS; validated through an automated test suite with 200+ samples

Technical Skills

Languages: Python, Java, C++, SQL
Frameworks: Django, TensorFlow, PyTorch, Flask, FastAPI
Cloud & DevOps: AWS (EC2, S3), Docker, Linux, CI/CD Pipelines, Nginx
Testing: Unit Testing, Integration Testing, Performance Testing, Automation
Databases: PostgreSQL, MongoDB

Achievements

Competitive Programming: Top 1.4% (40,000) AlgoUniversity Accelerator Camp, Top 120 (80,000) Graphs Camp, 150+ DSA problems solved
Hackathons: G. Viswanathan Hackathon Finalist, Smart India Hackathon Finalist – demonstrated quality-driven development under pressure