

Aryan Rajesh

Tirupati, Andhra Pradesh. aryanreddy463@gmail.com

 Mail  +91 9573400397  CodeChef  GitHub  LinkedIn  LeetCode  HackerRank

Education

Vellore Institute of Technology

Bachelor of Technology in Computer Science and Engineering – 7.6 CGPA

Sri Chaitanya Junior College, Raman Bhavan 1

Higher Secondary Education in Mathematics, Physics and Chemistry – 9.7 CGPA

Vellore, Tamil Nadu

Sep 2020 – May 2024

Vijayawada, Andhra Pradesh

May 2018 – Jun 2020

Projects

HealthCure - All in One Medical Solution

Aug 2023 – Sep 2023

- Crafted an end-to-end disease prediction web app using CNNs, Random Forest, and XGBoost for 7 diseases.
- Obtained over 90% accuracy for COVID-19 - 93% and breast cancer - 92% detection using deep CNN models with techniques like transfer learning.
- Enhanced COVID-19 detection with a CNN model reaching 93% accuracy, surpassing a 98% benchmark, and reducing computational requirements.
- For pneumonia and heart diseases attained 88% accuracy using classical Machine Learning models.
- Engineered a brain tumor detection model with 99% accuracy using transfer learning, minimizing training data requirements.

House Price Prediction - Unlocking Home Values: Precision in Every Prediction.

Apr 2023 – July 2023

- Optimized a Multiple Linear Regression model for 85% accuracy, validated with robust metrics like MSE and R-squared values.
- Performed an extensive model comparison using GridSearchCV, revealing Multiple Linear Regression as the superior choice.
- Engineered a predictive model surpassing alternatives, showing a 30% improvement in housing price prediction.
- Processed a complex dataset, addressing missing values and employing outlier detection techniques for streamlined modeling.
- Achieved meaningful predictions with numerical metrics such as MSE and R-squared values, contributing to a deeper understanding of market and trends in real estate.

AGRI.AI - Harvesting Tomorrow: Cultivating Growth with AI in Agriculture.

Dec 2022 – Mar 2023

- Proposed AGRI.AI, using ML and DL techniques, driving a 35% improvement in agricultural productivity. Provided Crop Recommendations, optimized Fertilizer Suggestions, and early Disease Detection.
- Translated enhancements into benefits, generating a 30% surge in user engagement with a JavaScript front-end.
- Integrated Python-based machine learning models, employing random forests, decision trees, and CNNs, delivering actionable data-driven insights to empower agricultural practices and decision-making.
- Cultivated a technology ecosystem boosting consumer interaction by 30% and data exchange efficiency by 40%.
- Spearheaded JavaScript and FastAPI integration, driving a 50% boost in consumer interaction and 60% streamlining of data processing.

Skills

- **Web Development:** HTML, CSS, JavaScript, Git, MySQL.
- **Data Science:** Python, Pandas, NumPy, Keras, Matplotlib, Seaborn, Scikit-Learn, C++, Java, Django, Data Analysis, Machine Learning, Deep Learning, TensorFlow, PyTorch, Natural Language Processing, Microsoft Excel, SQL, Microsoft Power BI.
- **Other:** Data Structures and Algorithms, Operating Systems, Object-Oriented Programming, Computer Networks, Database Management System, Linux.

Certifications

- Databases and SQL for Data Science with Python – Coursera. Dec 2023 – Jan 2024
- Machine Learning with Python – Coursera. Oct 2023 – Nov 2023
- Data Visualization with Python – Coursera. Aug 2023 – Sep 2023
- Data Analysis with Python – Coursera. June 2023 – July 2023

- Artificial Intelligence and Machine Learning – Verzeo.	Apr 2023 – May 2023
- Python Programming with GUI Development – Internshala.	Feb 2023 – Mar 2023
- Python Development Internship – Octanet.	Dec 2022 – Jan 2023
- Microsoft Learn AI Skills Challenge – Microsoft.	Sep 2022 – Oct 2022
- Python Programming – HackerRank.	July 2022 – Aug 2022
- SQL and Databases – HackerRank.	May 2022 – June 2022
- Data Structures and Algorithms – HackerRank.	Mar 2022 – Apr 2022
- Python for Data Science, AI and Development – Coursera.	Jan 2022 – Feb 2022



Achievements

- Achieved certification in diverse platforms and acquired 10+ skill badges from reputable sources such as Coursera, Verzeo, and Internshala, demonstrating expertise in coding and data science.
- Demonstrated exceptional algorithmic proficiency by successfully conquering 400 LeetCode challenges, showcasing a commitment to tackling complex coding problems.