

# Aryan Rajesh

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 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

Aug 2023 – Sep 2023

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

### House Price 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.
- Applied advanced statistical techniques to analyze market data, resulting in precise predictions with MSE and R-squared values; empowered stakeholders to make data-driven decisions in real estate market analysis, fueling revenue growth and strategic investments.

### AGRI.AI

Dec 2022 – Mar 2023

- Designed AGRI.AI using ML and DL techniques, driving a 35% improvement in agricultural productivity through 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.
- Leveraged state-of-the-art ML techniques using random forests alongside CNN implementations; identified the 3 biggest causes affecting low crop yields across diverse farms in targeted regions.
- Cultivated a technology ecosystem boosting consumer interaction by 30% and data exchange efficiency by 40%.
- Directed JavaScript and FastAPI integration, driving a 50% boost in consumer interaction and 60% streamlining of data processing.

## Skills

- **Web Development:** HTML, CSS, Tailwind CSS, Bootstrap, JavaScript, Git, GitHub, MYSQL.
- **Data Science:** Python, Pandas, NumPy, Keras, Matplotlib, Seaborn, Plotly, Scikit-Learn, NLTK, Hugging Face Transformers, C++, Java, Django, Data Analysis, Artificial Intelligence, Machine Learning, Deep Learning, TensorFlow, PyTorch, Natural Language Processing, LLM, GPT-3.5, BERT, Microsoft Excel, SQL, Microsoft Power BI.
- **Other:** Data Structures and Algorithms, Operating Systems, Object-Oriented Programming, Computer Networks, Database Management System, Linux, Probability, Statistics.

## Certifications

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– 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

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- Achieved certification in diverse platforms and acquired 10+ skill badges from reputable sources such as Microsoft, HackerRank, Coursera, Octanet, 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.