

# YASH RAJ

Central University of Haryana, Mahendergarh, Haryana-123029 | [yashraj3376@gmail.com](mailto:yashraj3376@gmail.com) | [LinkedIn](#) | [GitHub](#)

Innovative and results-driven Computer Science Engineer with a strong foundation in AI and Software Development. Proven ability to design, implement, and optimize algorithms for real-world applications. Skilled in data analysis, cloud computing, and deploying scalable AI solutions. Adept at collaborating with cross-functional teams to deliver impactful projects. Passionate about leveraging AI and data-driven insights to tackle complex challenges and drive efficiency. Committed to continuous learning and advancing cutting-edge technologies.

## Education

### Bachelor of Technology (B. Tech), Computer Science and Engineering (CSE)

Central University of Haryana (CUH) | Mahendragarh, Haryana

Oct-2020 to Aug-2024 | GPA 7.86/10

## Work Experience

### Ignitus WorldWide Co | Madrid, Spain

ML-LMS Research Intern | Feb-2024 to Aug-2024

- Led collaborative initiatives with INRIA, LIRMM, and Université Paul Valéry to enhance biodiversity management using advanced machine learning methodologies.
- Engineered a multimodal model that integrated diverse data streams, culminating in a validation loss of 0.31626 and significantly enhancing species distribution predictions.
- Optimized model architectures through hyperparameter tuning, resulting in a 20% improvement in predictive accuracy for species identification tool Pl@ntNet.
- Developed high-resolution maps of species composition across Europe, empowering strategic biodiversity management and conservation efforts.

### Central University of Haryana | Haryana, India

Research Intern | Sep-2023 to Jan-2024

- Developed a predictive model for sleep onset detection from wrist-worn accelerometer data, achieving 92% accuracy and reducing manual analysis time by 40%.
- Performed comprehensive Exploratory Data Analysis (EDA) to elucidate data patterns, successfully identifying significant trends and outliers.
- Transformed raw accelerometer data through meticulous preprocessing and feature engineering, ensuring model reliability for precise sleep window detection.

### Cloud Counselage Pvt. Ltd. | Mumbai, India

Machine Learning Intern | Jul-2023 to Sep-2023

- Developed a predictive analytics model for the "PathfinderED: Navigating Graduation & Career Success" project, achieving a remarkable 90% accuracy on validation datasets while reducing processing time by 18%.
- Leveraged newly acquired skills in machine learning techniques to enhance the model's efficiency, contributing to improved user experiences and data-driven decision-making processes within the organization.

## Skills

### Technical Stack:

#### Programming Languages:

*Proficient:* Python (5 years), C/C++ (3 years), SQL (2 years)  
*Familiar:* R, JavaScript

#### AI/ML frameworks:

Tensorflow, Keras, PyTorch, Scikit-learn, LangChain

#### Cloud Platforms:

AWS, GCP

#### MLOps Tools:

MLflow, DVC, Docker, Kubernetes, GitHub Actions

#### Data Manipulation and ETL:

Pandas, NumPy, SQL, MySQL, MongoDB, Apache Spark

#### Computer Vision:

OpenCV

#### Web Frameworks:

FastAPI, Flask

#### Data Visualization Tools:

Power BI, Matplotlib/Seaborn, Excel, Orange3

#### Version Control and Collaboration:

Git, GitHub, DagsHub

#### Markup/Styling Languages:

HTML, CSS, LaTeX

#### Other tools:

*Development Tools:* Jupyter Notebooks, VS Code, Spyder  
*Scripting:* Shell

*AI Tools:* Dialogflow, ChatGPT

*Cybersecurity tools*

**Soft Skills:** Critical Thinking, Problem-Solving, Effective Communication, Team Collaboration, Adaptability, Data-driven Decision Making, Research & Analysis, Project Management.

## Projects and Portfolio

- A comprehensive overview of all my projects and research works, showcasing my expertise and application of skills across various domains - [Projects](#)
- A collection of my blogs sharing insights on AI, and emerging technologies - [Blogs](#)

## Achievements

- Qualified UGC NET JRF (2024) – Computer Science and Applications.
- Solved 300+ programming and DSA problems on LeetCode, ranking in the Top 20% of coders globally.
- 1st Place in University-Level Web Development Competition organized by Bytecode Learners, the university's coding club.

## Certifications

- [Introduction to Machine Learning](#) -Swayam NPTEL certification (Apr 2023).
- [Machine Learning and Deep Learning - Fundamentals and Applications](#) -Swayam NPTEL certification (Oct 2023).
- [Introduction to Cyber Security](#) -Swayam IGNOU certification (Jan 2024).
- [Digital Forensics](#) -Swayam IGNOU certification (Aug 2022).
- [Introduction to Computer Science and Programming with python](#) -Edx MIT 6.00.1X course certification (Oct 2021).
- [Image Processing using Python](#) -Swayam IGNOU course certification (Nov 2023).

## Personal Details

**Languages:** English and Hindi (fluency in English)

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