# YASH RAJ

**Central University of Haryana, Mahendergarh, Haryana-123029**  |  yashraj3376@gmail.com  |  LinkedIn  |  GitHub

Innovative and results-driven Computer Science Engineer with a strong foundation in Software Development, AI/ML, and Cloud Computing. Proven ability to design, implement, and optimize algorithms for real-world applications. Skilled in building and deploying scalable, high-performance applications using modern technologies. Adept at cross-functional collaboration, data-driven decision-making, and agile development practices. Passionate about leveraging AI and data insights to solve complex problems and drive efficiency. Committed to continuous learning and advancing cutting-edge technologies.

## Education

**Bachelor of Technology (B. Tech) in Computer Science and Engineering (CSE)**          **(Oct 2020 to Aug 2024)**
**Central University of Haryana (CUH)  |  Mahendragarh, Haryana  |** GPA 7.86/10

## Work Experience

**Software Developer Engineer  |  AST Consulting, Noida, UP**                                  **(Nov 2024)**
- Designed and developed a scalable HRMS platform using the Frappe framework, streamlining employee data management.
- Reduced operational costs by 40% and boosted productivity by 30% by automating workflows and minimizing manual tasks.
- Automated HR processes, significantly improving data accuracy, reducing errors, and increasing time efficiency.

**ML-LMS Research Intern  |  Ignitus Worldwide Co, Madrid, Spain**                      **(Feb 2024 to Aug 2024)**
- 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.

**Research Intern  |  Central University of Haryana CUH, Haryana, India**               **(Sep 2023 to Jan 2024)**
- Developed a predictive model for sleep onset detection from wrist-worn accelerometer data, achieving 92% accuracy and reducing analysis time by 40%.
- Performed comprehensive Exploratory Data Analysis (EDA) to elucidate data patterns, successfully identifying significant trends and outliers.
- Preprocessed accelerometer data and engineered features to ensure model reliability.

**Machine Learning Intern  |  Cloud Counselage Pvt. Ltd., Mumbai, India**               **(Jul 2023 to Sep 2023)**
- Developed a predictive model for the PathfinderED project, achieving 90% accuracy and reducing processing time by 18%.
- Leveraged machine learning techniques to optimize the model, enhancing data-driven decision-making.

## Skills

**Technical Stack:**

- **Programming Languages:**
  *Proficient:* Python (5 years), C/C++ (3 years), SQL (2years)
  *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

- **Projects:** A curated collection of all my projects and research works, demonstrating my expertise in AI, software development, and machine learning.  - **View Projects**
- **Blogs:** A collection of my blogs sharing insights on AI, and emerging technologies -  **Read Blogs**

## Achievements

- ❖ Qualified UGC NET JRF (2024) in Computer Science and Applications.
- ❖ Top 20% globally on LeetCode, with 500+ programming and DSA problems solved.
- ❖ 1st Place in University-Level Web Development Competition organized by Bytecode Learners (university coding club).

## Certifications

- **Introduction to Machine Learning** *-Swayam NPTEL (Apr 2023).*
- **Machine Learning and Deep Learning - Fundamentals and Applications** *-Swayam NPTEL (Oct 2023).*
- **Introduction to Cyber Security** *-Swayam IGNOU (Jan 2024).*
- **Digital Forensics** *-Swayam IGNOU (Aug 2022).*
- **Image Processing using Python** *-Swayam IGNOU (Nov 2023).*

## Personal Details

**Languages:** English (Fluent), Hindi
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