

YASH RAJ

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

Innovative Computer Science Engineer with strong expertise in Machine Learning and Data Science. Skilled in applying advanced algorithms to solve complex problems, enhancing efficiency and accuracy. Proficient in data manipulation, analysis, and visualization, as well as cloud computing and deployment technologies. Committed to continuous learning and improvement, with a passion for leveraging technical skills in artificial intelligence and data analytics.

SKILLS

Technical Skills:

- **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, Report Writing

EXPERIENCE

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MADRID, SPAIN

ML-LMS Research Intern.

Feb-2024 to Aug-2024

- Spearheaded collaborative initiatives with esteemed organizations, including INRIA, LIRMM, and Université Paul Valéry, to advance biodiversity management using cutting-edge machine learning methodologies.
- Conducted rigorous baseline experiments with Bioclimatic, Landsat, and Sentinel data, achieving validation losses of 0.25784, 0.26424, and 0.23555, respectively, underscoring model robustness.
- 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 innovative hyperparameter tuning, resulting in a 20% improvement in predictive accuracy for species identification tools.
- Developed high-resolution maps of species composition across Europe, empowering strategic biodiversity management and conservation efforts.
- Generated actionable insights that transformed conservation planning, greatly enhancing the efficacy of species identification tools such as Pl@ntNet.

Central University of Haryana

HARYANA, INDIA

Research Intern.

Sep-2023 to Jan-2024

- Designed and executed an advanced model to detect sleep onset and wake-up phases from wrist-worn accelerometer data, achieving an impressive 92% accuracy.
- 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

- Collaborated with a diverse, multidisciplinary team to implement sophisticated machine learning algorithms, effectively tackling real-world challenges and optimizing key business metrics.
- 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.

PROJECTS AND PORTFOLIO

- [Projects](#)
- [Kaggle Competitions](#)
- [Blogs](#)

EDUCATION

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

Central University of Haryana | GPA: 7.86/10

Haryana, India

Oct-2020 to Aug-2024

INTERMEDIATE (High school +2 PCM)

DAV Public School | Percentage: 89%

Ranchi, Jharkhand

May-2018 to Jul-2020

Relevant Courses

Intermediate Programming with Python, C, Object Oriented Programming using C++, Probability and Statistics, Linear Algebra, Calculus 1-3, Computer Networks, Operating systems, Theory of Computations, Machine Learning, Software Engineering, Distributed Systems, Linux and Unix Programming, Data Structures and Algorithms, DBMS, Cloud Computing.

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).
- **Computational Neuroscience** -Swayam IGNOU course certification (Oct 2023).

PERSONAL DETAILS

Languages: English and Hindi (fluency in English)

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LinkedIn: <https://www.linkedin.com/in/yash-raj-8b924a296/>

LeetCode: https://leetcode.com/u/yash_raj121/