

# Yash Raj

Innovative Computer Science Engineer with Expertise in Machine Learning and Data Science. Proven ability to collaborate effectively in multidisciplinary teams and deliver impactful solutions to real-world challenges. Seeking opportunities to leverage technical skills and contribute to cutting-edge projects in the field of artificial intelligence and data analytics.

## EDUCATION

### CENTRAL UNIVERSITY OF HARYANA

BACHELOR OF TECHNOLOGY IN COMPUTER SCIENCE AND ENGINEERING November 2020 - Present | Haryana, India | SGPA: 7.82

### DAV PUBLIC SCHOOL

INTERMEDIATE - PCM WITH COMPUTER SCIENCE (STANDARD 12TH BOARD) March 2018 - April 2020 | Ranchi, Jharkhand | Percentage: 89

## EXPERIENCE

### MACHINE LEARNING INTERN | CLOUD COUNSELAGE PVT. LTD. | MUMBAI, INDIA

July 2023 - Sept 2023 (Summer Internship 2023)

- Collaborated with a multidisciplinary team to apply machine learning algorithms to real-world challenges, enhancing the overall understanding of key business metrics.
- Developed a "PathfinderED": Navigating Graduation and Career Success Live Project, resulting in accuracy of 93% on the validation dataset and reduced processing time by 18%.

### DATA SCIENCE INTERN | BLACK COFFER PVT. LTD. | REMOTE

May 2023 - June 2023

- Conducted Data Mining activities to extract valuable insights from large datasets, resulting in a 15% increase in overall efficiency and cost saving.

### TRAINEE | ABYUDAY IIT-BOMBAY SUMMER TRAINING AND INTERNSHIP | MUMBAI

Jun 2022 - Aug 2022

- Developed a strong foundation in an application development using Python and Qt Designer, achieving proficiency in creating user-friendly interfaces and implementing key functionalities.

## PROJECTS

### EMOTION-BASED MUSIC PLAYER SYSTEM | PYTHON, JUPYTER, HTML, CSS

Mar 2023

- An emotion-based music player system is a concept where music selection and playback are influenced by the user's emotions or the desired emotional state. The system aims to create a personalized music experience that aligns with the user's current emotional needs or desired mood.

### HUMAN ACTIVITY CLASSIFICATION USING DEEP LEARNING

#### BASED ON 3D MOTION FEATURES | RESEARCH AREA

Ongoing May 2023

- Classify activities based on the movement feature of change in joint distance using Euclidean on the order of frames in each activity segment as input to CNN model.

## KAGGLE COMPETITIONS AND ACHIEVEMENTS

#### CHILD MIND INSTITUTE - DETECT SLEEP STATES

- The goal of this competition was to detect sleep onset and wake. We developed a model trained on wrist-worn accelerometer data in order to determine a person's sleep state.
- Secured 829 Rank worldwide out of 1878 submissions with public score of 0.719.

#### BINARY PREDICTION OF SMOKER STATUS USING BIO-SIGNALS

- The goal of this competition was to use binary classification to predict a patient's smoking status given information about various other health indicators.
- Secured 440 Rank worldwide out of 1908 submissions with public score of 0.87264

#### SALARY PREDICTION FOR JOB POSTINGS

- This competition was an in-class competition for the course, "Artificial Intelligence and Machine Learning (Fall 2023)", in Renmin University of China. The competition was to predict the salaries of jobs posted on websites in US..
- Secured 42 Rank worldwide out of 83 submissions.

#### ESO BATTERY FORECASTING HACKATHON

- The goal of the competition was to predict the charging and discharging patterns of batteries on the electricity network, and the key drivers of this behaviour, forecast battery behaviour for Great Britain's Electricity System Operator.
- Secured 25 Rank worldwide.

#### MULTI-CLASS PREDICTION OF CIRRHOSIS OUTCOMES

- The goal of the competition was to use a multi-class approach to predict the outcomes of patients with cirrhosis (Impaired liver function).

## ZINDI COMPETITIONS

#### CGIAR CROP DAMAGE CLASSIFICATION CHALLENGE

- Build a model to classify damage type across multiple seasons crop into five categories (Good growth (G),

Drought (DR), Nutrient Deficient (ND), Weed (WD), and Other (including pest, disease or wind damage)).

## SKILLS

### PROGRAMMING LANGUAGES

Python, C/C++, R, SQL

Familiar:

Python, R, SQL, Shell

### PYTHON LIBRARIES

Pandas, NumPy, TensorFlow, Sklearn, Keras, Scipy, OpenCV, PyTorch, Seaborn, Matplotlib, BeautifulSoup, PyQt, Streamlit

### MATHEMATICS

Statistics and Probability, Linear Algebra, Calculus

### OTHER

NLP, Deep Learning, API, Statistical modelling, Excel, PowerBI, HTML/CSS, Exploratory Data Analysis, Git & Github, MySQL & SQLite databases, Content Writing, Research and Analytics

## CERTIFICATIONS

- Swayam IGNOU Online course certification on 'Introduction to CyberSecurity'
- Swayam IGNOU Online course certification on 'Digital Forensics'
- Swayam NPTEL online course certification on 'Introduction to machine Learning'
- Edx MIT 6.00.1X online course on Introduction to Computer Science and Programming with Python.
- Swayam NPTEL online course certification on 'Data Analytics with Python'
- Swayam IGNOU Online course certification on 'Image Processing using Python'
- Swayam IGNOU Online course certification on 'Computational Neuroscience'.

## AREA OF INTEREST

- Data Science/Machine Learning/Deep Learning
- Cybersecurity
- Digital Forensics
- Computational Neuroscience

## PERSONAL DETAILS

- Languages : English & Hindi fluency in English
- Address : Ranchi, Jharkhand, India 834001
- Contact no : [\(+91\)764-484-9436](tel:+917644849436)
- Email : [yashraj3376@gmail.com](mailto:yashraj3376@gmail.com)
- [Github](#)
- [LinkedIn](#)
- [Kaggle](#)
- [LeetCode](#)

