

Rahul Jana

i.rahuljana@gmail.com | +917797285050
Chandigarh, India

EDUCATION

CHANDIGARH UNIVERSITY BE IN COMPUTER SCIENCE AND ENGINEERING

June 2022 | Punjab, India
CGPA: 7.35 / 10.0

LINKS

Github:// [RahulJana](#)
LinkedIn:// [rahuljana-4](#)

COURSEWORK

Machine Learning with Python
Deep Learning
Computer Vision
Image Processing
Natural Language Processing
Operating Systems
Computer Networks

SKILLS

PROGRAMMING

• Python • TensorFlow • OpenCV
• Bash • Linux • Docker • SageMaker
• DynamoDB • MongoDB • MySQL

CERTIFICATES

• Machine Learning - Stanford University, Coursera
• Neural Networks and Deep Learning - DeepLearning.AI, Coursera

ACHIEVEMENTS

• Represented Animal Health Monitor and Bee Watcher from AWaDH in **TIPS3.0** at IIT-Kanpur.
• Developed a Voice-Controlled Switch Box, which was selected for **Socially Relevant Project** and **APJ Abdul Kalam Innovation Conclave** at Chandigarh University.
• Intern of the Month(May,2022) at Springworks.

EXPERIENCE

IHUB-AWADH, IIT-ROPAR AND CSIR-CSIO

SOFTWARE ENGINEER

January, 2024 - Present | Chandigarh

- Leading the Cloud and Machine Learning team consists of **20+ members**, developing and delivering Cloud-based and Machine Learning based solutions.
- Designed and deployed AWS-based cloud-based solution with **~98% uptime**.
- Engineered and fine-tuned the Data collection and annotations pipeline, resulting in **~30%** reduction in data collection time and **~10%** enhancement in ML model's performance.
- Designed and developed Cloud and Machine Learning solution Biodiversity sensor. To collect, store, and use that data to generate results. Used **YOLO**-based custom framework to detect different species of insects from a frame with **~92% accuracy** and analyzed bee hives' audio to predict their health, with **~88% accuracy**.

Tools Used: Python, TensorFlow, Docker, SageMaker, DynamoDB, Lambda, S3.

PROJECT ASSOCIATE

April, 2023 - January, 2024 | Chandigarh

- Made various improvements in the initial flow for the activity and heat detection of the cattle and deployed the model performing with **85% accuracy**.
- Developed pipeline for analysis and generating custom visualization for **E-tongue's** data consisting of **7 sensors** and implemented ML-based solutions for inferring results.
- Contributed to an AI-based interior design project. Used a **custom U-Net with VGG-16 encoder** and **Style Transfer** for segmenting different components and changing the design of those components.

Tools Used: Python, TensorFlow, DynamoDB, Lambda, S3.

SPRINGWORKS | MACHINE LEARNING INTERN

September 2021 - July 2022 | Remote

Document Parser:

- Built several components for Document Quality detection and Improvement for checking different document components(Govt. IDs).
- Handled edge cases on document quality and decreased manual labor by **~18%**.
- Developed a DL model for detecting and correcting tilt in the uploaded document.

Crypto Trading Project:

- Optimised the run-time for the Crypto trading algorithm in the cloud from **~950 seconds** to **~750 seconds** (by **~20%**) with live trading data.

Tools Used: Python, TensorFlow, OpenCV, Docker, EC2, S3.

PROJECTS

HABITABLE EXO-PLANET CLASSIFICATION | Github

- Developed a Habitable Exo-Planet Classification System, based on the **data** collected from **NASA's Kepler Space Telescope** using **Transit Method**. Achieved accuracy of **97.4%**.
- **Tools Used:** Python3, TensorFlow, scikit-learn, Streamlit.