

Rudramani Singha

rudramanisingha.com | +91 9167435345

EDUCATION

BE, IT

UNIVERSITY OF MUMBAI
2018 | Present

AS AND A LEVELS

UNIVERSITY OF CAMBRIDGE
2016 | 2018

IGCSE

UNIVERSITY OF CAMBRIDGE
2010 | 2016

SPECIALIZATION

CERTIFICATIONS

(Verifiable @ linkedIn)

TensorFlow in practice
AWS Fundamentals
Deep Learning
TensorFlow: Data and deployment
Applied Data Science with Python
Machine Learning on GCP
Full-Stack Development (React)
Certified Microsoft Office Specialist

PROGRAMMING

Languages:
Python • Javascript • C++ • SQL
Frameworks/Tools:
Tensorflow • Keras • Pytorch
GCP • DeepLearning • Django
Flask • Pandas • Bootstrap
Other skills:
Blender 3D • AutoCAD • Photoshop

SUPPLEMENTARY

VOLUNTEER EXPERIENCE

Head of Technical @ IEEE-RGIT
Technical Lead @ ABIT RGIT
Operations Manager &
Technical Trainer @ Codecell RGIT
Bronze Standard Member @ IAYP

PATENTS

202121031007 • Jul, 2021
Motor Intent Prediction technique
using RNN + EEG
202111034856 • Aug, 2021
Realtime face liveness detection using
texture and behavioural analysis
202111043497 • Oct, 2021
Advanced OCR engine for identity
extraction using computer vision and
language processing

EXPERIENCE

NEUROVISION | FOUNDER & CEO

Jun 2021 – Present | Mumbai

- We are a brain-machine interface startup that is developing early warning detection systems for epileptic patients.
- I am responsible for operations, finance, and most importantly, development of solutions for the customers.

AZYO | MACHINE LEARNING CONSULTANT

Mar 2021 – Present | San Diego

- Designed and implemented the authentication system using facial recognition and anti-spoofing counter measures.
- Led the development for sign language recognition project. (mediapipe + LSTM)
- Developed the proctoring system using gesture and behaviour recognition.

CSKAA | MACHINE LEARNING ENGINEER - INTERN

Oct 2020 – Feb 2021 | New Delhi

- Refactored the entire OCR pipeline and integrated it with Google Vision API for up to 30% faster performance and better accuracy.
- Created Regex post processing engine to support 11+ different document formats.

RESEARCH

RGIT - ALGORITHM DESIGN LAB | UNDERGRADUATE RESEARCHER

Jan 2021 – Jul 2021 | Mumbai

Worked with Prof Nilesh Rathod to create a tool which helps in preliminary diagnosis of health index by learning from user's movements.

RGIT - SOFT. COMPUTING LAB | UNDERGRADUATE RESEARCHER

Jun 2020 – Dec 2020 | Mumbai

Led the research and development of an end-to-end over-speed detection + license plate recognition system.

PROJECTS

- 2021 Diminished reality based realtime object remover
- 2021 Live Document text extraction system in Django
- 2020 Face Biometric Recognition using Deep Neural Networks
- 2020 Gesture Recognition based Camera using Raspberry pi
- 2020 Car Speed + License plate reader for overspeed detection
- 2020 Intent based Chatbot module with BERT for customer support.

PUBLICATIONS

(Preprint @ rudramanisingha.com/papers.html)

- [1] R. G. Singha, M. Lad, A. Rohekar, and S. Wankhade. Vehicle speed detection using multi-branch networks from temporal image pairs. *4th International Conference on Smart Systems and Inventive Technology (ICSSIT 2022)*, in press.
- [2] R. G. Singha, M. Lad, G. M. Shipurkar, and N. Rathod. Dynamic pose diagnosis with blazepose and lstm for spinal dysfunction risk estimation. *4th International Conference on Smart Systems and Inventive Technology (ICSSIT 2022)*, in press.