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
Certified Microsoft Office Specialist

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

SUPPLEMENTARY

VOLUNTEER EXPERIENCE
(Details @ LinkedIn)
Head of Technical @ IEEE-RGIT
Technical Lead @ ABIT RGIT
Operations Manager &
Technical Trainer @ Codecell RGIT
Bronze Standard Member @ IAYP

PATENTS
(Details @ rudramanisingha.com/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

VAO | Machine Learning Intern
Dec 2021 – Present | San Francisco
- Working directly under Dr. Valentina Pedoia and Dr. Davide Onofrio to engineer NLP models focused on improving supply chain predictability.

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 – Dec 2021 | San Diego
- Designed and implemented the authentication system using facial recognition and anti-spoofing countermeasures.
- Using gesture and behaviour recognition, led the development of sign language recognition & proctoring system.

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 with Dr. Sunil Wankhade.

PROJECTS

(Projects available @ rudramanisingha.com)
2021   Diminished reality based realtime object remover
2020   YOLOv5 + GCP for Gesture Recognition on Raspberry pi
2020   Intent based Chatbot module with BERT for customer support.

PUBLICATIONS

(Preprint @ rudramanisingha.com/papers)

[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.