

# Rochan Sharma

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# **SKILLS**

#### **PROGRAMMING**

Python SQL Java script

# DEEP LEARNING | MACHINE LEARNING

Convolution Neural Networks Medical Imaging Artificial Neural Networks Regression Support Vector Machines Naive Bayes K-Nearest Neighbors Decision Trees Cluster Analyses Natural Language Processing

#### **SOFTWARE | LIBRARIES**

Keras
Tensorflow
Git and Github
MongoDB
PostgreSQL and PostGIS
Amazon Web Services
kafka

# **EDUCATION**

# PH.D. IN INFORMATION TECHNOLOGY

NARSEE MONJEE INSTITUTE OF MANAGEMENT STUDIES (NMIMS) August 2020 | Mumbai Campus Maharashtra

# M.TECH. BY RESEARCH IN ARTIFICIAL INTELLIGENCE

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES July 2019 | Dehradun, Uttrakhand

# B.TECH. IN COMPUTER SCIENCE AND ENGINEERING

KURUKSHETRA UNIVERSITY June 2016 | Kurukshetra, Haryana Graduated with Honors

# INTRODUCTION

2+ years of experience with a passion to solve real world business problems. Proficient in deploying complex machine learning and statistical modeling algorithms/techniques for identifying pattern and extracting valuable business insights.

### **EXPERIENCE**

# RELIANCE INSUSTRIES LIMITED | DATA SCIENTIST

Jan 2019 - Present | Mumbai, Maharashtra

#### **AMEOTECH INFORMATICS** | PYTHON DEVELOPER

Sep 2016 - May 2017 | Mohali, Punjab

# **PROJECTS**

#### • Incident Management Platform (IMP)

- Al Platform for reducing Process and Safety incidents to ensure the safety of the workers at the RCP manufacturing districts and Operational sites.
  - Reliance Manufacturing & Operations Risk Management

#### • Covid-19: Video Analysis on Social Distancing and Mask Usage in Reliance

 Using Computer Vision to ensure the safety of the people at the RCP plant sites. Use of CCTV feeds to monitor social distancing and wearing face masks while at work, and detect violations which trigger real time voice alerts on the floor.

- Jio Platforms Limited

### • Petro-Retail Video Analysis

- Edge-computing based live stream analytic using SSD MobileNet lite for monitoring and identification of sales loss at RIL Petro Retail forecourt.

- Reliance Industries Limited

#### • Corporate Security Video Analysis

- Gait analysis and action recognition using fuzzy logic and deep learning.

- Reliance Industries Limited

### Karyotyping

- Pairing and ordering of human chromosomes in a microscopic camera image to generate Karyotype reports.
- Semantic Segmentation of chromosomes using E-net and U-net model.

- Reliance Life Science

#### • Single Cell

- Image analysis method to ensure that ranking of final clones obtained are actually single cell clones of the highest quality with documentation proof.

- Reliance Life Science

#### Kidney Tumor Segmentation - KiTS

- The goal is to develop reliable kidney and kidney tumor semantic segmentation methodologies.
- World Rank 83 at Satellite Event organized by MICCAI 2019.

- MICCAI 2019

#### • BraTS (Brain Tumor Segmentation 2019)

- Segmentation of FLAIR part in pre-operative MRI scans to give segmented nifti format file.

- MICCAI 2019

# **INTERNSHIPS**

# RELIANCE INSUSTRIES LIMITED | DATA SCIENCE

**INTERN** 

Jan 2019- June 2019 | Mumbai

# WILDLIFE INSTITUTE OF INDIA - ISRO | DEPPT OF AI

RESEARCH

June 2018 - November 2018 | Dehradun

#### WOBOT.AI | INTERN

April 2018 - May 2018 | Ahmedabad

### LINKS

LinkedIn: ROCHAN SHARMA

# **HOBBIES**

Attending Conferences | Volunteer Activities | Watching Discovery Channel | Meetups | Book Fair Visit | Auto Expo Visit | Riding Cars | Movies & Music

#### • Allen and Unwin application development

- Experienced with full software development (Backend frontend database)
- Built Web application using Python, Django, Flask, JavaScript, AJAX and HTMI
- Worked with various Python Integrated Development Environments like Spyder, PyCharm.

- A&U 2018

### **PUBLICATIONS**

- [1] An Automated Animal Classification System: A Transfer Learning Approach
- [2] Kidney and Tumor Segmentation using U-Net Deep Learning Model
- [3] Identification of Glioma from MR Images Using Convolutional Neural Network
- [4] Modeling of Main Burner in Sulphur Recovery Unit using Artificial Neural Networks
- [5] Classifying Type of Head and Neck Cancer using Deep Convolutional Neural Networks

### ADDITIONAL ACTIVITIES

Member of Artificial Intelligence Club - A&SI Group, Reliance Member of Productization Club - A&SI Group, Reliance

# **CERTIFICATIONS**

- Neurohacking in R
- Neural Networks and Deep Learning
- Improving Deep Neural Networks: Hyper-parameter tuning, Regularization and Optimization
- Structuring Machine Learning Projects
- Convolutional Neural Networks
- Artificial Intelligence Foundation: Machine Learning
- Advance Python
- Python Essential Training

All the information mentioned in the resume are correct to the best of my knowledge and believe.