# Rohit Nagar

Junior | Mechanical Engineering | IIT Jodhpur nagar.2@iitj.ac.in | +91-9352265001

## **EDUCATION**

## **IIT JODHPUR**

B.TECH IN MECHANICAL ENGG. May 2023 | Jodhpur, India CURRENT CGPA: 7.15/10

## **GOVT.SR. SEC. SCHOOL**

CLASS 12 | RBSE

May 2018 | Kehsorai Patan,India PERCENTAGE 90.00 %

## SARASWATI SR. SEC. SCHOOL

CLASS 10 | RBSE

May 2016 | Keshorai Patan, India PERCENTAGE 88.83 %

## SKILLS

### **PROGRAMMING**

Proficient:

- C++ Javascript HTML5
- CSS3 Bootstrap4 Python
- PyTorch Matplotlib Familiar:
- Inferential Descriptive Statistics
- Matlab Latex C Flask

#### **DEVELOPMENT**

- Git React Firebase
- AWS

#### **OTHER SKILLS**

- Coampetitive Programming
- Solidworks Adobe XD
- Tshirt-Design Excel Team Work
- Communication

# LINKS

Github:// nagar2817 LinkedIn:// rohit-nagar Twitter:// @nagar\_tweets CodeForces: // nagar2817

# COURSEWORK

#### UNDERGRADUATE

Introduction To Computer Science Linear Algebra Calculus and Differential Equations Introduction to Machine Learning Data Structures and Algorithms Scientific Computations

## **PROJECTS**

## **REGION SEGMENTATION** I ML COURSE PROJECT

Jan 2021 - Feb 2021

- Did a critical analysis of the Research Paper that is based on Region Segmentation with Genetic Alogrithm and K-mean Clustering.
- It is kind of optimized solution. where we search the combination of representative values providing the minimum euclidean difference between representative values and image data.
- With Genetic Algorithm we get almost similar results of region segmentation for any initial values. Need no to worry about intial number of cluster.

## FLAME SPEED COMPUTATION | SEMESTER PROJECT |

Aug 2021 - Present | Mentor: Prof. Sudipto Mukhopadhyay

- Instead of traditional matlab software, we use different ML techniques and Neural Network algorithms for Laminar Burning Speed estimation.
- Multiple Deep Neural Network models for predicting LBV values were developed and validated. Also compared different Machine learning algorithms.
- we studied the effect of training database by changing the size and dimension.

## AMAZON CLONE | SELF PROJECT | 127

Aug 2021 - Present |

- Developed a Amazon clone using ReactJS and deployed it on Firebase with real time database. Front-end was completely built on ReactJS and material UI.
- Features like user authentication, Addition of Production, Checkout and real time of rendering of orders were implemented.
- Tech Stack :- React, Redux, Firebase

#### SUDUKO PUZZLE SOLVER | SELF PROJECT | C

Apr 2021 - Present

- A Real world deployed Suduko Puzzle Solver app using deep learning. Identification of existing digits are done using Optical Character Recognition.
- Tech Stack :- Python, OpenCV, OCR, Keras and Tensorflow

## **ACHIEVEMENTS**

2021 Solved around 350+ problems on **Codeforces** and **IBhub** plateform.

2019 One of the Student to recieve **A**- out of 140+ in Electromagnetism and Optics.

2019 **JEE-19**: Among top 1% percentile of 1.3 million Applicants in JEE-2019

## MOOC'S

- Analysis of Alogrithms (Coursera)
- Responsive Web Design
- Python Zero to Mastery Bootcamp
- AWS Machine Learning Foundations Nanodegree Program 🗹
- Building Transformer-Based NLP Applications by Nvidia Deep Learning Team |
- Introduction to Inferential and Descriptive Statistics (\*ongoing..)

# **EXTRACURRICULAR**

- Participated in many cultural Event and programming contest hosted by IITJ Pclub.
- Core member of Poster designing team, Ignus 2019.