# Nikhil Raj

Junior Undergraduate
Department of Economics Sciences
Indian Institute of Technology, Kanpur

▼ rnikhil@iitk.ac.in
 ↑ nikhilraj | in nikhil raj
 ↓ (+91) 7079493523

## **Educational Qualifications**

Year	Degree/Certificate	Institute	CPI/%
2019 - Present	B.S.	Indian Institute of Technology, Kanpur	6.1/10.0
2019	CBSE-XII	S.K.Mother International School	76%
2017	CBSE-X	S.K.Mother International School	10.0/10.0

## **Projects**

# **Loan Prediction** | Analytics Vidhya | Self Project | Python

July'21

- Developed a machine learning model to classify good and bad customers and ranked to there default probability
- Applied (EDA) techniques for data cleaning and feature understanding and trained a logistic regression for prediction
- Secured 156th rank on the leaderboard among 2000+ participants attaining an overall prediction accuracy of 91%

Face Detection | Image/Video Analytics | Computer Vision | Self Project | Python

Dec'20

- Developed an object detection system for images and videos using computer vision and open cv concepts
- Applied Cascade classifier for image detection and achieved an overall accuracy of 98% in top 100 images/videos

#### Login and Registration | Self Project | C++

Sept'21

- Developed a Login and Registration system to capture the details of username and password and update any details
- Used C++ builder for interface designing, environment set up and used concepts of File Handling, Functions, etc.

#### COVID19 prediction using Machine Learning | Course Project | Prof. Somesh Mathur

Jan'21 - Mar'21

- Used distributions like Weibull, Gaussian, Log-Normal to identify the best fit model over covid dataset
- Used python libraries Pandas, NumPy, Seaborn, Matplotlib for plotting Various Probability Distribution Curves
- Used reliability package in python to found out the best distribution available for certain analysis
- Used Levenberg-Marquardt (LM) algorithm for identifying parameters to gain best possible curve fitting
- Examined the credibility of the model using three different metrics MAE, MSE and R2-Score

#### Technical Skills

• Languages: Python, C, C++, SQL, HTML, CSS

• Libraries: Numpy, Pandas, Open CV, Matplotlib, Scikit-learn, Seaborn

• Tools: Excel, Word, PowerPoint

#### Relevant Courses

\* - Online Courses

Applied Probability and Statistics	Fundamentals of Computing	Econometrics 1
Growth Economic Theory	Data Structure and Algorithms	SQl Foundamentals*
Financial Econometrics	Development Economics	Machine Learning*

## Positions of Responsibility

- Junior executive at Hospitality in Asia's largest cultural festival, Antaragni 2019
- Junior Executive, Public Relation at one of the largest inter-college sports festival, Udghosh 2019

#### Extra Curricular

- Volunteered in National Cadet Corps at Indian Institute of Technology Kanpur for academic year 2019-20
- Volunteered in Blood Connect Organisation, helping to create Blood Awareness, Conducting Blood Donation Campus
- Participated in Untangle, Gupchup, Tark, Kirdaar in Galaxy 20, Intra IITK Cultural Championship
- Participated in Intra Hall Cricket Championship and Won the first Prize
- Compose and program music in python using Earsketch