# **Kaushik Thakkar**

### Curriculum Vitae

kaushik-thakkar

### Education

#### M.Sc. Indian Institute of Technology Kanpur, Statistics

July 2022 to May 2024

- CPI: 9.08/10.0
- Coursework: Probability Theory, Statistical Computing, Multivariate Analysis, Data Science Labs, Inference, Machine Learning, Bayesian Analysis.

#### **B.Sc.** Ramakrishna Mission Residential College Narendrapur, Statistics

July 2019 to May 2022

- CPI: 9.59/10.0
- Coursework: Statistics, Mathematics and Computer Science.

# Experience \_\_\_\_\_

Barclays Global Service Centre Private Limited, Risk Graduate Analyst

Noida, India July 2024-

## Center for Artificial Intelligence and Robotics (CAIR), DRDO, Intern

Mentor: Ms. Lakshmi Annamalai, Sc 'E'

Bengaluru, India May 2023 to July 2023 2 months

- Conducted a literature review on Out-Of-Distribution(OOD) detection methods including Mahalanobis method, KL-Matching, and energy/entropy-based methods.
- Compared the effectiveness of different OOD detection methods with the method  $developed \ by \ CAIR \ in \ identifying \ out-of-distribution \ samples \ using \ standard \ datasets.$

# Technologies \_\_\_\_\_

Languages: Python, R, SQL, LTFX

**Softwares:** Visual Studio Code, Excel, PowerPoint

# Projects \_\_\_\_\_

### **Binary Classification Using Some Notions Of Kernelized Data Depths**

Jan-May 2024

Mentor: Dr. Subhajit Dutta ☑, IIT Kanpur

- Explored kernelized data depth functions for binary classification and introduced novel depth measures (sphere depth and kernelized spatial depth) capturing multimodality in data clouds.
- Compared the efficacy of depth-based features in binary classification using machine learning algorithms and simulated data.

### **Pairs Trading: A Strategy Exploration**

Sept-Dec 2023

Mentor: Dr. Amit Mitra Z, IIT Kanpur

- Identified co-integrated stock pairs and developed a trading strategy using moving averages.
- Optimized trading signal thresholds to maximize profits and tested potential profitability.

#### **Analysis Of Indian Web Series**

Aug-Dec 2022

Mentor: Dr. Dootika Vats ☑, IIT Kanpur

- Scraped data from IMDb using rvest library, performed exploratory analysis, and extracted valuable insights.
- Developed an interactive R Shiny app enabling users to explore data through dynamic plots and visualizations.

### Aug-Sept 2021

### **Predicting Tomorrow's Rainfall in Australia**

Self project

- Completed data preprocessing and exploratory data analysis.
- Implemented machine learning models and achieved 85.95% validation set accuracy through iterative refinement.

# Awards and Achievements \_\_\_\_\_

- Awarded the Ramesh Chandra Yadav Scholarship for the academic year 2022-23 and 2023-24 at IIT Kanpur.
- Secured All India Rank 41 in Joint Admission Test for Masters (JAM) Mathematical Statistics, 2022.