## Education

2018 - Now **PhD Economics** Delhi School of Economics University of Delhi 2016 - 2018M.A. Economics Ambedkar University Delhi | 7.63 CPI **B.A.** Honors, Economics 2013 - 2016College of Vocational Studies University of Delhi | 74.23 %

## Experience

Teaching Fellow - Ashoka University (Spring 2023) Course - Introduction to Economics

## **Publications - Conference**

# Analyzing Micro-Level Rebound Effects of Energy **Efficient Technologies**

with Mayank Jain, Dr. Tarek AlSkaif, Dr. Soumyabrata Dev NeurIPS 2022 - Tackling Climate Change with Machine Learning Establishing appliance level rebound effects upon shift to more efficient and substitutable counterparts.

## Impact of Load Demand Dataset Characteristics on Clustering Validation Indices

with Mayank Jain, Dr. Tarek AlSkaif, Dr. Soumyabrata Dev 2021 International Conference - SEST

Generating methodology to recommend best CVIs in unsupervised learning to cluster the Electricity Load Demand Dataset

# Ongoing Projects

## Automation, Patience and Employment

with Dr. Mausumi Das, Dr. Ayona Bhattacharjee Modeling & empirically testing justification for differential adoption of automated & artificially intelligent technologies across the world.

## Can Sustainable Energy Rebound? A Behavioral Experiment

with Mayank Jain, Dr. Tarek AlSkaif, Dr. Soumyabrata Dev Model and empirically test significance of rebound effects and other behavioral changes upon introduction of Sustainable Energy

# Identifying Vulnerable Households of India

with Dr. Anirban Kar

Devising a new vulnerability index to empirically identify vulnerable households using machine learning models.

### **Technical Skills**

Stata, R, C++, python - TensorFlow, Pandas, Numpy MatplotLib, Adobe Photoshop, HTML, CSS, LATEX

## **Publications - Journal**

## Which internal validation indices to use while clustering electric load demand profiles?

with Mayank Jain, Dr. Tarek AlSkaif, Dr. Soumyabrata Dev 2022 Sustainable Energy, Grids and Networks, Elsevier Exhaustive methodology to determine the choice of CVI in unsupervised clustering of electric load demand profiles.

#### Awards and Certificates

- CDE Fellowship for Jan 2019-June 2023, Centre of Development Economics, Delhi School of Economics, University of Delhi
- UGC-NET Qualification Certificate in Economics, November 2017
- · Academic Merit Scholarship, MA Economics, Ambedkar University, Delhi
  - Winter Semester (2017-18)
  - Monsoon Semester (2017-18)
  - Winter Semester (2016-17)
  - Monsoon Semester (2016-17)
- · Academic Award and Scholarship, B.A. Honors Economics, College of Vocational Studies, University of Delhi
  - First Year II<sup>nd</sup> Position
  - Second Year III<sup>rd</sup> Position
  - Third Year III<sup>rd</sup> Position

#### Courses

## Deep Learning Specialization

Coursera Course - By Andrew NG et al

#### Data Science Ethics

Audit: Coursera Course - By University of Michigan et el

#### Other Activities

- Student Seminar Coordinator for year 2020-21 for conducting seminars at Delhi School of Economics.
- Member of Organizing Committee of Conference on Economic Theory and Policy, held at Ambedkar University Delhi, during 9-10 March 2018
- Elected member of Student Faculty Committee (SFC), MA Economics, Ambedkar University (2016-17)
- Volunteer at Winter School (2018-2022) Annual Conference by Delhi School of Economics
- Participated in Gyanodaya Educational Trip and researched on "Banaras: Kashi then Varanasi now" studied evolution of Banaras city in past century
- · Cleared Praveshika (2005-06) and First Year Examination (2006-07) in Bharatnatyam from Prayag Sangeet Samiti, Allahabad