

Mukta Jain

🏠 Research Scholars Room, DSE | ✉ mukta.jain@ashoka.edu.in | ✉ muktajain@econ.dse.org | 🌐 [linkedin.com/in/muktajain96](https://www.linkedin.com/in/muktajain96)

Education

- 2018 – Now **PhD Economics**
Delhi School of Economics
Topic: *The Economics of Automation & AI*
- 2016 – 2018 **M.A. Economics**
Ambedkar University, Delhi | 7.63 CPI
- 2013 – 2016 **B.A. Honors, Economics**
CVS, University of Delhi | 74.23 %

Conferences

- Automation, Impatience & Growth**
with Mausumi Das, Ayona Bhattacharjee
Advanced Graduate Workshop - 2023 & International Conference on New Technologies & the Future of Work in Global South - 2023
Modeling reason for differential automation adoption in world
- Analyzing Micro-Level Rebound Effects of Energy Efficient Technologies [Link]**
with Mayank Jain, Tarek AlSkaif, 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 [Link]**
with Mayank Jain, Tarek AlSkaif, 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, Inequality & Growth**
with Mausumi Das, Ayona Bhattacharjee (Supervisors)
Modeling reason for differential automation & AI adoption in world
- Identifying Vulnerable Households of India**
with Anirban Kar (PhD Advisor)
Devising a new vulnerability index to empirically identify vulnerable households using machine learning models.
- Measuring Rate of Time Preference: A Developing Country Perspective**
with Mausumi Das, Ayona Bhattacharjee (Supervisors)
Measure pure rate of time preference of people in India
- Can Sustainable Energy Rebound? An Experiment**
with Mayank Jain, Tarek AlSkaif, Soumyabrata Dev
Model and empirically test significance of rebound effects and behavioral changes after sustainable energy

Technical Skills

Stata, R, python (TensorFlow, pyTorch, Pandas)
MatLab, Adobe Photoshop, C++, HTML, CSS, L^AT_EX

Publications - Journal

- Which internal validation indices to use while clustering electric load demand profiles? [Link]
with Mayank Jain, Tarek AlSkaif, 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.

Experience

- Visiting Faculty - *Ashoka University*
Course - Macroeconomic Theory II (Spring 2024)
- Teaching Fellow - *Ashoka University*
Course - Introduction to Economics (Spring 2023)

Awards and Certificates

- CDE Fellowship, Centre of Development Economics, Delhi School of Economics, University of Delhi
Jan 2019-June 2023
- UGC-NET Qualification Certificate in Economics
November 2017
- Academic Merit Scholarship, MA Economics
Ambedkar University, Delhi
All four semesters
- Academic Award & Scholarship, B.A. Honors Economics,
College of Vocational Studies, University of Delhi
All three years

Courses

- Deep Learning Specialization
Coursera Course - By Andrew NG et al
- Data Science Ethics
Audit: Coursera Course - By University of Michigan et. al.

Other Activities

- Student Seminar Coordinator (2020-21)
To conduct weekly seminars at DSE
- Elected member of Student Faculty Committee (SFC)
Ambedkar University (2016-17)
- Volunteer at Winter School (2018-22)
Annual Conference by CDE & DSE
- Member of Student Organizing Committee
Annual Conference of Ambedkar University (2018)
- Participant - Gyanodaya Educational Trip
Researched on "Banaras : Kashi then Varanasi now"
studied evolution of Banaras city in past century
- Blackbelt* - Taekwondo, Kukkiwon's 1st Dan Promotion
on 14 July 2022 (Certificate No. 05764979)
- Cleared Praveshika (2005-06) & First Year (2006-07)
Bharatnatyam from Prayag Sangeet Samiti, Allahabad