

TAHIA ANAN DHIRA

Economist | Applied Econometrics | Network Analysis | Computational Social Science

Email: tahiaanand@gmail.com ; dhiraanan@du.ac.bd

GitHub: <https://github.com/TAD600>

Website: <https://tahiaanandhira.com/>

DU profile: https://www.du.ac.bd/body/faculty_details/ECO/2459

ORCID: 0000-0001-7403-9862

EDUCATION

- MSc in Applied Social Data Science (ASDS) (Degree: Distinction) 2023
The London School of Economics and Political Science, London, United Kingdom
Relevant coursework: Social Network Analysis; Quantitative Text Analysis; Applied Machine Learning; Managing and Visualizing Data; Research Design
- MSS in Economics (CGPA: 3.88 / 4.00) 2017
University of Dhaka, Dhaka, Bangladesh
- BSS in Economics (CGPA: 3.94 / 4.00) 2016
University of Dhaka, Dhaka, Bangladesh

RESEARCH EXPERIENCE

Capstone Project, MS ASDS, LSE | 2023

Formation of friendship network: Analysing assortment of pro-sociality and personality type

- Designed and implemented a behavioural classroom experiment to study homophily and friendship network formation.
- Estimated Exponential Random Graph Models (ERGMs) to identify structural and attribute-based drivers of network formation.
- Examined the role of personality traits, and prosocial behaviour in network formation

Coursework: ST445, MS ASDS, LSE | 2022–2023

Topic-based content and sentiment analysis of COVID-19 vaccine: a study using Reddit

- Mostly contributed to the writing part.

Selected Applied Research Projects

Mental Health of University Students Before and After Online Education

University Grants Commission (UGC)-funded project | 2020–2021

- Contributed to the implementation of a longitudinal survey examining changes in university students' mental health before and after the transition to online education.
- Coordinated data collection, validated survey instruments and analysed survey data using econometric methods.

Willingness to Pay for Treating Mental vs. Physical Illness

Bangladesh Medical Research Council (BMRC)-funded project | 2020–2021

- Contributed to the coordination and implemented a comparative survey for university students and adults.

WORKING PAPERS & MANUSCRIPTS

Who converges with whom? Global migration network and the geography of development (working paper, 2026)

- Constructed a panel of directed weighted bilateral migration networks spanning 23 years.
- Developed reproducible workflows for network construction, visualization, and manuscript figures.
- Contributed to the conceptual framework and manuscript preparation.

Gendered Cultural Hierarchies in Social Media Audience Discourse: Evidence from Bangladeshi Artists (working paper, 2026)

- Developed a Python pipeline using the YouTube Data API v3 to collect and process more than 8 million comments.

- Constructed a cleaned corpus of over 7 million YouTube comments for computational text analysis.
- Implemented reproducible data processing and analysis workflows in Python and R.

Product Reproducibility and Trade Patterns: Evidence from Cultural Goods

(submitted, 2026)

- Constructed global trade networks for unique and reproducible cultural products, and non-cultural products.
- Estimated augmented gravity models using STERGMs and PPML regressions.

PUBLICATIONS

Huque, R., **Dhira, T. A.**, et al. (2023). Determinants of client satisfaction with health insurance: Evidence using a mixed-method approach from Bangladesh. *SSM - Health Systems*, 3.

<https://doi.org/10.1016/j.ssmh.2023.100264>

Rahman, M. A., **Dhira, T. A.**, et al. (2022). PHQ-9 validation in Bangladesh. *PLOS ONE*.

<https://doi.org/10.1371/journal.pone.0269634>

Dhira, T. A., Rahman, M. A., et al. (2021). GAD-7 validation in Bangladesh. *PLOS ONE*.

<https://doi.org/10.1371/journal.pone.0261590>

Mehareen, J., Rahman, M. A., **Dhira, T. A.**, et al. (2021). Mental health during COVID-19. *Journal of Affective Disorders Reports*. <https://doi.org/10.1016/j.jadr.2021.100179>

ACADEMIC APPOINTMENTS

Assistant Professor, Department of Economics, University of Dhaka

October 2025 – present

Lecturer, Department of Economics, University of Dhaka

November 2018 – September 2025

- Taught 10 different undergraduate courses in economics.
- Supervised undergraduate dissertations and research projects.
- Trained STATA to the undergraduate and graduate students.
- Applied R, Python, and Stata in teaching and research.

Lecturer, Department of Economics, East West University

March 2018 – October 2018

TECHNICAL SKILLS

Programming & Data Analysis

- Python (NumPy, Pandas, Matplotlib, NetworkX)
- R (*network analysis*: igraph, statnet, ergm, tergm, sna, networkDynamic, ITNr, wdnet, *text analysis*: quanteda, stm, *econometrics*: fixest)
- Stata

Methods

- Network analysis
- Quantitative Text Analysis
- Advanced Econometrics (Panel data analysis, Time series analysis, Causal Methods)
- Survey methodology

Research Workflow & Tools

- GitHub, GitHub Copilot,
- Claude Code,
- LaTeX,
- Qualtrics

AWARDS AND SCHOLARSHIP

Commonwealth Master's Scholarship

2022

Multiple Gold Medals for highest CGPA (BSS & MSS Economics)

2016, 2017

LANGUAGE

Advanced fluency in English and Bangla