

Maghfira Ramadhani (Afi)

School of Economics
Georgia Institute of Technology
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Education

Ph.D. Economics, Georgia Institute of Technology, expected 2027.

Minor in Higher Education

Committee: Dylan Brewer (co-chair), Bobby Harris (co-chair), Casey Wichman

M.S. Economics, Georgia Institute of Technology, 2025.

B.S. & M.S. Petroleum Engineering, Institute of Technology Bandung, 2021.

Research Interests

Energy and Environmental Economics, Applied Microeconomics, Empirical Industrial Organization

Working Paper

"Digital Dispatch and Demand Response in Grid Emergencies: Evidence from Household Cooling in California's Flex Alerts" (with Dylan Brewer and Soren Anderson)

Received Third Year Paper Award at Georgia Tech School of Economics

Work in Progress

"Pollution, Avoidance Behavior, and Health" (with Bobby Harris)

"Battery Storage and Natural Gas Generator Market Power" (*Job Market Paper*)

Peer Reviewed Publications

"Managing zero-marginal-cost, intermittent renewable energy: A survey of the engineering, economic, and policy challenges"

(with Daniel Matisoff, Matthew Oliver, Santiago Grijalva, Oliver Chapman, and Amanda West).

Renewable and Sustainable Energy Reviews. 2026.

"National oil companies and fossil fuel subsidy regimes in transition: The case of Indonesia"

(with Muhammad Ihsan and Matthew Lockwood).

The Extractive Industries and Society. 2022.

Honors, Fellowships, and Awards

2025 Herbert P. Haley Fellowship, Diversity Fellowship in Environmental and Energy Economics (Berkeley/Sloan), Google Cloud Research Credit, Georgia Tech EPICenter Summer Fellowship, Best Third Year Paper Award, Georgia Tech CRIDC Award, Omicron Delta Epsilon Travel Award (×2)

2022 Georgia Tech Graduate Fellowship (2022-2027), Richard House Fellowship (2022-2024)

2021 Best Master Graduate, Institute of Technology Bandung

2013-2017 Dean's List, Society of Petroleum Engineers Scholarship

Conference, Workshops, and Training

* indicates scheduled presentation

2026 IAEE@ASSA Annual Meeting*

2025 AERE@SEA Annual Meeting; Berkeley/Sloan Summer School in EEE; Atlanta Economics PhD Student Symposium; AERE Summer; Georgia Tech CRIDC; Empirical Method in Energy Economics

2024 BREAD-IGC PhD course on Urban Economics; SWEEEP at Georgia Tech; CU Environmental and Resource Economics Workshop; EPICenter at Georgia Tech

2022 Southeast Asia Energy Transition Partnership, Australian National University

Professional Membership

AERE (Association of Environmental and Resource Economists),
USAEE/IAEE (International Association for Energy Economics)

Professional Activities

AMIE Mentoring Program (2025-2026); Georgia Tech Economics Chair Search Committee (2025-2026);
AERE Summer Ad-Hoc Abstract Reviewer (2025); AERE@SEA Ad-Hoc Abstract Reviewer (2025);
Founder and Organizer Georgia Tech Economics PhD Workshop (2025)

Affiliations

Student Affiliate, Energy Policy and Innovation Center (EPICenter), 2024-present

Teaching Experience

Georgia Institute of Technology

Instructor of Record: ECON2250 Statistics for Economists (Fall 2025) [[Course Website](#)]

Tech to Teaching Certificates, Center for Teaching and Learning, 2025

Head TA: ECON7103 PhD Environmental Economics (Spring 2025),
ECON4440/6380 Environmental Economics (Spring 2025, Summer 2023,2024),
ECON4351 International Economics (Spring 2023),
ECON4170 Mathematical Economics (Spring 2023,2024),
ECON3110 Advanced Microeconomics (Fall 2023), ECON3300 Energy Economics (Fall 2023),
ECON3161 Econometric Analysis (Fall 2022), ECON2250 Statistics for Economists (Fall 2024)

Institute of Technology Bandung

Instructor and Head TA: TM6051 Energy Policy (2017-2022), TM4021 Energy Economics (2017-2022),
TM4025 Optimization & Operation Research in Oil and Gas (2017)

Previous Employment

Academic Professional, Institute of Technology Bandung 2017-2022.

Affiliations: Center for Research on Energy Policy; Indonesia Center of Excellence on Carbon Capture and Storage; Carbon and Environmental Research Indonesia; Expert Staff in Energy, Office of West Java Governor

Other Publication

* indicates former undergraduate student advisee

“Is cheap fuel policy a (short-term) remedy for costly transportation in rural Indonesia?” (with Muhammad Ichsan, Yusuf Martak, Chitra Septyandrica, and Purnomo Yusgiantoro). *Proceeding of Medan International Conference on Energy and Sustainability 2020*

“Optimization of hydraulic fracturing and economic analysis using production sharing contract and gross split for well-X on a naturally fractured volcanic reservoir: A case study of geothermal well Y in Indonesia” (with Prasandi Abdul Aziz, Willy Dharmawan*, Steven Chandra, and Wijoyo Daton). *Proceeding of 4th International Conference on Earth Science, Mineral and Energy 2021*

“Comparative Study on Fixed-Price Contract versus Incentive-Based Contract in Indonesia’s Oil and Gas Industry” (with Stephen Salomo*, Muhammad Rahmadhani*, Asep Permadi, and Ari Iskandar). *Proceeding of the 46th Indonesia Petroleum Association Convention and Exhibition 2022*. [\[Preprint\]](#)

“CO₂ sink and source matching for better CO₂ utilization in increasing oil production: Case study of field X and Y in Indonesia” (with Prasandi Abdul Aziz, Steven Chandra, and Wijoyo Daton). *Proceeding of 3rd International Conference on Earth Science, Mineral, and Energy 2020*.

Additional Information

Software: Stata, R, Python, L^AT_EX, Julia (basic)

Language: English (fluent), Bahasa Indonesia (native)

Citizenship: Indonesia (F-1 Visa)

Last updated: December 20, 2025