

# MAGHFIRA “AFI” RAMADHANI

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School of Economics  
Georgia Institute of Technology  
221 Bobby Dodd Way NW  
Atlanta, GA 30332

## CURRENT EMPLOYMENT

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Graduate Teaching Assistant and Graduate Research Assistant 2022 - present  
School of Economics, Georgia Institute of Technology

## RESEARCH INTERESTS

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Energy and Environmental Economics, Political Economy

## EDUCATION

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Ph.D. in Economics, Georgia Institute of Technology Expected 2027  
M.S. in Petroleum Engineering, Institute of Technology Bandung July 2021  
ADVISOR: Purnomo Yusgiantoro  
B.S. in Petroleum Engineering, Institute of Technology Bandung July 2017

## PUBLICATIONS

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### PEER-REVIEWED

“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. [Published Version]

### CONFERENCE PROCEEDING

“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. [Final Draft Version][Gated Version]

“CO2 sink and source matching for better CO2 utilization in increasing oil production: Case study of field X and Y in Indonesia” (with Steven Chandra, Prasandi Abdul Aziz, and Wijoyo Daton). *Proceeding of 3rd International Conference on Earth Science, Mineral, and Energy 2020*. 2021. [Published Version]

“Is cheap fuel policy a (short-term) remedy for costly transportation in rural Indonesia?” (with Muhammad Ihsan, Yusuf Martak, Chitra Septyandrica, and Purnomo Yusgiantoro). *Proceeding of Medan International Conference on Energy and Sustainability 2020*. 2021 [Published Version]

### POLICY BRIEF

“Persembahan ITB: Energi untuk Indonesia [ITB’s Policy Recommendation: Energy for Indonesia]”. 2020. ITB Press: Bandung. ISBN 978-623-297-022-9 (Editor)

## WORK IN PROGRESS

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“How do households respond to grid emergencies? Evidence from California’s Flex Alert”

“Managing Transition to Intermittent Renewable Electric Power” (with Daniel Matisoff, Matthew Oliver, Oliver Chapman, and Amanda West)

## SCHOLARSHIP, HONORS, AND AWARDS

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School of Economics Graduate Fellowship, Georgia Institute of Technology 2022 - 2027  
Richard House Fellowship, Georgia Institute of Technology 2022 - 2024  
Best Master Graduate, Institute of Technology Bandung 2021  
Society of Petroleum Engineers Undergraduate Scholarship 2015 - 2017  
Dean’s List, Faculty of Mining and Petroleum Engineering, Institute of Technology Bandung 2013 - 2017

## FUNDED RESEARCH

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Co-Investigator. "Development of Upstream Petroleum Economics Algorithm in Python" Indonesian Upstream Oil and Gas Special Task Force, IDR 2,800,000,000.	2022
Co-Investigator. "Study of Strategic Alliance & Partnership with Advanced Technology Provider" Indonesian Upstream Oil and Gas Special Task Force, IDR 1,000,000,000.	2021
Co-Investigator. "Economic Impact Evaluation of One Price Fuel Policy" Institute of Technology Bandung Research and Community Services Fund, IDR 50,000,000.	2020

## TEACHING EXPERIENCE

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### Georgia Institute of Technology

<b>Centre for the Integration of Research, Teaching, and Learning Associate Certificates</b>	Spring 2024
<b>Head Teaching Assistant</b>	
ECON 4170: Mathematical Economics (undergraduate). <i>Instructor: Matthew Oliver</i>	Spring 2023, 2024
ECON 3110: Advanced Microeconomic Analysis (undergraduate). <i>Instructor: Matthew Oliver</i>	Fall 2023
ECON 3300: International Energy Markets (undergraduate). <i>Instructor: Matthew Oliver</i>	Fall 2023
ECON 4170: International Financial Economics (undergraduate). <i>Instructor: Tibor Besedes</i>	Spring 2023
ECON 3161: Econometric Analysis (undergraduate). <i>Instructor: Shatakshee Dhongde</i>	Fall 2022

### Institute of Technology Bandung

#### **Instructor**

TM 4215: Petroleum Economics and Project Management (undergraduate)	Spring 2022
TM 4021: Energy Economics (undergraduate)	Spring 2021 - 2022

#### **Head Teaching Assistant**

TM 6051: Energy Policy and Planning (graduate). <i>Instructor: Purnomo Yusgiantoro</i>	Spring 2018 - 2022
TM 4021: Energy Economics (undergraduate). <i>Instructor: Purnomo Yusgiantoro</i>	Spring 2018 - 2020
TM 4025: Optimization in Oil and Gas Industry (undergraduate). <i>Instructor: Silvyia Rahmawati</i>	Fall 2017

## PROFESSIONAL ACTIVITIES

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### **Associations**

Association of Environmental and Resources Economics (AERE)  
International Association of Energy Economics (IAEE)  
United States Association of Energy Economics (USAEE)

### **Training/Workshop**

Evidence-based Teaching Practices for Economics School of Economics, Georgia Institute of Technology	2022
South East Asia Energy Transition Partnership - Roundtables Executive Training Institute for Climate, Energy, and Disaster Solutions, Australian National University	2022
Graduate Course Credit: SP6015 Quantitative Methods for Public Policy Analysis School of Architecture, Planning and Policy Development, Institute of Technology Bandung	2022
Online Course: Fundamental Data Analysis in Energy with R Practisee.id	2021
Workshop: Systems Thinking in Digital Transformation Era School of Business and Management, Institute of Technology Bandung	2020

### **Consulting**

Feasibility Study of Carbon Credits in Geothermal Power Plant, PT Geo Dipa Energi	2021 - 2022
Feasibility Study of ANG Market in West Java province, Pangaea Energy Ltd.	2021 - 2022
Study of Subsurface Engineering using Big Data Analytics,	2021
Study of Decarbonization Roadmap to Achieve Net Zero Emission, PT Pertamina	2021
Recommendations for Increasing Petroleum Production in Indonesia, Indonesian Presidential Office	2020
Background Study of Medium Term Development Plan 2020-2024, National Planning Agency	2018

## University Service

### Institute of Technology Bandung

Proceeding Publication Organizer for National Seminar	2021 - 2022
Liaison Officer Coordinator for National Seminar	2021
Organizing Committee for International Virtual Courses on Improved Oil Recovery	2021
Judge in Case Study Competition SPE SUPERBOWL, SPE ITB Student Chapter	2021
Judge in Energy Presentation Competition, IATMI ITB Student Chapter	2020
Judge in Energy Debate Competition, IATMI ITB Student Chapter	2019
Organizing Committee for Undergraduate Final Projects Expo	2018 - 2022
Vice Coordinating Minister of Student Welfare, ITB Students Assembly	2017 - 2018
Head of Student Development Division, Petroleum Engineering Students Associations	2016 - 2017

## PREVIOUS EMPLOYMENT

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Academic Professional	2017 - 2022
Petroleum Engineering Department, Institute of Technology Bandung	
<u>Affiliations:</u> Drilling, Production, and Oil and Gas Management Research Group, Center for Research on Energy Policy, Institute for Research and Community Services, Carbon and Environmental Research.	
Expert Staff at the Energy and Mineral Resource Services Office of the West Java Governor	2019 - 2020
Facilitator at the Energy and Mineral Resources Working Group Optimization and Synchronization Team of the West Java Governor	2018 - 2019
Consultant Indonesia Strategic Institute (INSTRAT)	2018

## OTHERS

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<b>Software</b>	Stata, R, Python, Julia, MATLAB, EViews, L <sup>A</sup> T <sub>E</sub> X
<b>Languages</b>	English (Fluent), Bahasa Indonesia (Native)
<b>Citizenship</b>	Indonesia (F-1 Visa)