



Name: Salema Metwaly Abdo Ali

Researcher & Assistant Lecturer | PhD Candidate in Statistics *Specializing in Applied Statistics, Macro-econometric Modeling, and Machine Learning*

E-mail	salema.ali@feps.edu.eg / salema.ali@ip.edu.eg
Occupation	Researcher -Assistant Lecturer
Professional Profile	Dedicated Researcher and Assistant Lecturer with over 10 years of experience in data analytics and economic modeling. Currently serving at the Macroeconomic Policies Center (Institute of National Planning), with a background as a National Expert for EU and UN projects. Expertise spans classical econometric methods, national accounts, and cutting-edge Artificial Intelligence applications in diagnostic modeling.
Major	Statistics
Minor	Applied statistics and econometrics
Current position	Assistant Lecturer Macroeconomic Policies Center <i>Institute of National Planning (INP), Egypt</i> <i>March 2023 – Present</i> - Economic Modeling Unit: Developing structural frameworks and macro-econometric models for the Egyptian economy. - Economic Governance Unit: Conducting policy analysis to enhance institutional efficiency and national development strategy.
Academic Qualifications	Doctor of Philosophy (PhD) in Statistics Faculty of Business Administration, Alexandria University 2025 – Present Status: Currently preparing the research seminar and proposal registration. Academic Standing: Completed PhD preparatory coursework with Distinction. Master of Science (M.Sc.) in Statistics Faculty of Economics and Political Science (FEPS), Cairo University 2023 Grade: Very Good Thesis Title: "On Non-Negative Estimation of Variance Components in Models of Pooled Data: A Comparative Study with an Application." Key Focus: Advanced econometric modeling, variance component analysis, and longitudinal (pooled) data applications.



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- **Bachelor of Science (B.Sc.) in Statistics**
 - **Faculty of Economics and Political Science (FEPS), Cairo University | 2015**
 - **Major:** Statistics | **Minor:** Economics
 - **Grade:** Very Good
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Key Research & Publications

- **IEEE International Publication (2026): Author,** *"A High-Sensitivity Hybrid Classification Model Based on PCA and SVM for Breast Cancer Diagnosis."* (Utilizing Principal Component Analysis and Support Vector Machines).
 - **Arab Development Report (8th Edition, 2024): Contributor,** *"Data and Statistics – National Accounts in Arab Countries."*
 - **Academic Journal Publication (2025):** *"Evaluating the Performance of the Tourism Sector in Egypt in Light of Sustainable Development,"* Scientific Journal of Economics and Commerce, Ain Shams University.
 - **UNFPA Strategic Reports (2023–2025):** Co-authored national reports on *"Ending Unmet Needs for Family Planning"* and *"Ending Maternal Mortality in Egypt."*
 - **Egypt Vision Post-2025:** Research lead on *"Tax Policy in Light of Expected Developments"* for the long-term national developmental vision.
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Professional & Expert Experience

- - **National Short-Term Expert (EU Project - PARLOD Egypt):** Modernized local governance frameworks and designed professional diplomas for local government (2018–2019).
 - **Working Group Member (African Peer Review Mechanism - APRM):** Strategic contributor to continental governance and socio-economic evaluations (2017).
 - **Research Associate (National Planning Institute):** Contributing to national strategic studies since 2016.
 - **Data Analyst (CAPMAS):** Managed large-scale national datasets for demographic and economic reporting (2015–2016).
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Technical & Methodological Expertise	Statistical Modeling	Variance Components Estimation, Pooled/Panel Data Analysis, Hypothesis Testing, Non-negative Estimation.
	Econometrics	Macro-econometric Modeling, Policy Simulation (GEM-Core, ISIM), Structural Frameworks, National Accounts Analysis.
	Machine Learning	Principal Component Analysis (PCA), Support Vector Machines (SVM), Hybrid Classification Models, High-Sensitivity Diagnostic Modeling.
	Developmental Policy	Decentralization, Local Governance Reform, Sustainability Indicators, Sustainable Development Goals (SDGs).
	Software & Tools	SPSS, EViews, R/Python (implied by IEEE/SVM work), Digital Transformation Frameworks.
International Training & Certifications	• ITC-ILO (Turin, Italy): Workshop on <i>Green Building and Decent Work</i>. • ESCWA: Advanced Policy Simulation training under Dr. Hans Lofgren (World Bank/ESCWA). • Arab Planning Institute (Kuwait): Five specialized certifications in Efficiency Evaluation, Innovation, and Sustainable Development Finance (2023–2024). • Supreme Council of Universities: Certified in Digital Transformation (2023).	
Areas of interest	- ITC-ILO (Turin, Italy): Workshop on Green Building and Decent Work. - ESCWA: Advanced Policy Simulation training under Dr. Hans Lofgren (World Bank/ESCWA). - Arab Planning Institute (Kuwait): Five specialized certifications in Efficiency Evaluation, Innovation, and Sustainable Development Finance (2023–2024). - Supreme Council of Universities: Certified in Digital Transformation (2023).	