

Islam Mohamed Gaber

PhD | PMP

Remote Sensing and Geospatial Research

islammohamed1606@gmail.com | ORCID 0000-0001-8282-0122

Research profile

CEO and Co-founder of TerraQant, an artificial intelligence solutions company. Geospatial researcher and GIS practitioner connecting remote sensing, spatial data analysis and operational information systems. Research interests include urban heat, atmospheric dust, precipitation and climate-sensitive planning. Professional experience includes enterprise GIS, imagery-based environmental analysis and GIS training. Recent work includes a preprint on managed aquifer recharge screening; future work focuses on satellite-driven water intelligence and climate-risk monitoring.

Education

PhD in Arts in Geography, Tanta University, awarded 31 December 2025. First-Class Honor.

Doctoral thesis: Modeling the Spatiotemporal Variations of Atmospheric Dust Concentrations in the Western Desert of Egypt and Assessing their Future Trends: A Study in Applied Climatology, Using Remote Sensing and Geographic Information Systems.

Master of Arts in Geography, South Valley University, awarded 29 August 2022. Excellent.

BA in Arts, Geography and GIS, South Valley University, May 2017. Very Good with Honors; second in the GIS division.

Research directions

Satellite-driven water intelligence; urban thermal environments; atmospheric dust and climate variability; geospatial AI for environmental monitoring; climate considerations in spatial planning.

Selected publications

2026. Modeling Urban Heat Island Mitigation Strategies in Egyptian Cities Using ENVI-met. HBRC Journal 22(1), Article 61. DOI: 10.65800/2090-9934.1060.

2026. Low-Intensity Precipitation Dominates Peninsular Spain (1961-2022). International Journal of Climatology 46(12), e70516. DOI: 10.1002/joc.70516.

2021. Climate Factors Affecting Sustainable Human and Tourism Comfort in Aswan Governorate. Agro-Environmental Sustainability in MENA Regions, pp. 381-403. DOI: 10.1007/978-3-030-78574-1_17.

The 2021 chapter is published under the author name Islam M. Jaber. The full publication inventory distinguishes journal articles, book chapters and their evidence sources.

Research and professional experience

Islam Mohamed Gaber

Selected professional appointments and assignments

TerraQant | Chief Executive Officer and Co-founder | Artificial intelligence solutions.

Senior Advanced Data Science Analyst through ATSS, water-planning GIS assignment for the Saudi Ministry of Environment, Water and Agriculture. Assignment commenced 21 January 2024; title translated from the Arabic experience letter.

GIS Consultant, Midtown, 1 April 2023 to 1 September 2024. Work included deep-learning waste detection, satellite and aerial imagery analysis, enterprise GIS applications, spatial database quality and training.

GIS Specialist, Telecom Egypt, 14 September 2022 to 18 January 2024. Full-time appointment.

GIS and electronic subdivision management, Al-Marasem, 26 January to 31 December 2020.

GIS Trainer, IVECOM, 1 May 2017 to 1 May 2019.

Scientific service and presentations

Peer review: Scientific African, PLOS Climate and Journal of Water and Climate Change. Public ORCID records 10 review activities as of 22 October 2026; additional historical completion evidence is retained in the private audit. Scientific committee service: EMCEI 2021 and 2023.

ICEWSE 2026: online oral presentation, 5-6 October 2026.

Professional credentials and development

Project Management Professional, PMI, awarded 27 February 2026; certificate expiry 27 February 2029. Saudi Council of Engineers: Specialist in Geographic Information Systems; certificate expiry 16 December 2026.

GIS Specialization, University of California, Davis via Coursera, 2019. Esri Cartography and Earth Imagery at Work courses, 2019. Power BI PL-300T00 training, February 2023.

Languages

Arabic: native. English: good spoken and written, self-assessed.