



CURRICULUM VITAE

Dr. Islam Abou El-Magd

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Name	Islam Hamza Abou El-Magd
Born	1965, Cairo, Egypt
Qualifications	BSc, MSc, MPhil, PhD, CSci, CEnv
Present Position	Associate Professor
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Outline

Islam Abou El-Magd graduated from the University of El-Mansoura, Egypt where he also obtained a Masters degree in Environmental Earth Sciences. After graduation he worked as a GIS analyst and then GIS project manager for the Cabinet Information and Decision Support Centre (IDSC), the Cabinet, Egypt. Then he moved to academic work and appointed as assistant lecturer for one academic year in the Geography department, United Arab Emirates University. Dr. Abou El-Magd got in his career history about 25 years in total experience, in which 14 was for teaching and training including at Mansoura University, United Arab Emirates university, Southampton university, UK, and both Ain Shams and Suez Universities, Egypt. During this teaching experience, he taught GIS, Remote Sensing, thematic maps, and Environmental courses. Dr. Abou El-Magd is supervising six Masters Degree students and Four PhD. Degree students at various universities in Egypt and in different disciplines.

On the other side of the coin, Dr. Abou El-Magd has worked as a scientific researcher for the National Authority for Remote Sensing and Space Sciences, Cairo, Egypt, which focuses on the applied research using remote sensing and GIS in environmental related issues. Islam Abou El-Magd obtained a PhD from the school of Civil Engineering and the Environment, University of Southampton, UK on the application of GIS and remote sensing in water management. He has also involved in developing many of international, regional and national GIS projects in different disciplines. He worked as a GIS consultant to the Centre of Environment and Development for Arab Region and Europe (CEDARE), Arab League & UN. Then he appointed as GIS Program Coordinator for the university of Southampton and Gifford Excellence where he was responsible for building the technical skills of GIS, GPS and mobile GIS and remote sensing together with implementing mega projects. Currently he is working as Associate Professor for NARSS in the environmental sciences department. Currently, he is also working as international consultant for the FAO (Food and Agriculture Organization), WHO (World Health Organization), UNDP-Kuwait office for short term consultancy of these UN programs in the Middle East. He is a member of the space council of Egypt and representing Egypt as a focal point in some of the European-African space initiatives and partnerships such as GMES and Africa.



Qualifications and Awards

Professional Qualifications

Chartered Scientist (CSci), CIWEM "Council of Science", UK – November 2006

Chartered Environmentalist (CEnv), CIWEM "Council of Environment", UK – November 2006

PhD, School of Civil Engineering and The Environment, University of Southampton, UK

The thesis entitled "Improved image processing and geographic information systems techniques for improved water resources management" School of Civil Engineering and The Environment, University of Southampton (2004)

MSc, Faculty of Science, University of El-Mansoura, Egypt

The thesis entitled "Environmental studies on Lake Manzala, Egypt using remote sensing and geographic information systems" University of El-Mansoura, Egypt (1996)

Diploma: Faculty of Science, University of El-Mansoura, Egypt (1993)

BSc: "Special Geology" Faculty of Science, University of El-Mansoura, Egypt (1987)

Career History

August 2007 – Present

Job Title: Associate Professor [F/T]

Employer: National Authority for Remote Sensing and Space Sciences (NARSS), 23 Josef Tito St., El-Nozha El-Gedidah, Cairo, Egypt

Job Description:

Currently I am acting as the head of the department. The main role is administratively and both scientifically and technically manage the department to function remote sensing and GIS in research and development of environmental related issues. The main challenge is to develop the local capacity in research and development in the state-of-the-art technology of remote sensing and GIS and their applications. Currently I am managing few research projects that use multi-spectral remote sensing, hyperspectral remote sensing and radar technology in environmental management, water management, coastal research and land use planning, etc.

Other commitment is to develop the strategy of space science and technology in the institution and the training program that my institution offers to the community.

Other Acting Responsibilities

- International affairs coordinator with main organizing meetings with international partners, signing Memorandum of Understandings, planning for regional and international projects and training programs in space and remote sensing applications;
- Member of the space council of Egypt with main role to develop the policy and strategy of space and earth observation technologies in the country;
- Member of the African Union Commission working group to develop



the African Space Policy and strategy;

- **Member of the Implementation Plan Working G group of GEO to plan for the GEO 2025;**
- **Focal point of EU-AU space strategy including GMES and Africa initiative,**
- **Member of CODIS-2 GEO subcommittee for GIS and SDI in Africa;**

September 2011 – Present

Job Title: Associate Professor [P/T]

Employer: Environmental Science Department, Suez Canal University, Egypt

Job Description:

Teach undergraduate fundamentals of remote sensing and other environmental courses such as:

- Remote sensing
- Environmental pollution
- Environmental studies

September 2007 – June 2009

Job Title: Associate Professor [P/T]

Employer: Geography Department, Ain Shams University, Cairo, Egypt

Job Description:

Teach both undergraduate and post-graduate (Diploma) both fundamentals and advanced remote sensing and GIS. This is together with the supervision on the postgraduates' research projects. This includes:

- GIS
- Remote sensing
- GPS
- Environmental hazard
- Applied geomorphology

May. 2004 – July 2007

Job Title: Program Coordinator [F/T]

Employer: Gifford Excellence (Carlton House, Ringwood Road, Woodlands, Southampton, SO40 7HT) & University of Southampton

Job Description:

My role was to establish a GIS unit capable for:

- developing the individual's technical skills by preparing and providing training courses,
- managing research and development program,
- managing the implementation of consultancy projects,

This included the coordination and development of GIS systems in various applications particularly for **Environmental Impact Assessment** studies. An example was the Mersey Gateway and Watford Health Campus projects. Other effective projects was developing mobile GIS system to survey and study the geomorphological auditing of the main rivers in UK on a real time update of the river information.

Jul. 2003 – Dec. 2003

Job Title: International Consultant [P/T]

Employer: IPTRID/FAO (Food and Agriculture Organisation), Rome Italy

**Job Description:**

This job was for the IPTRID/FAO working on the Wca-Infonet system, and was done remotely from UK. The main objectives were: 1) evaluating the system; 2) acting as editor to review the existing Kos within the system; 3) providing Knowledge Objects (KOs) to improve the digital library of the GIS and remote sensing applications for water, agriculture and environment.

Jan. 2003 – Dec.
2003

Job Title: GIS Research Developer [P/T]

Employer: SPUTNIK Project (School of Civil Engineering and The Environment, University of Southampton, Southampton, SO17 1BJ, UK: Prof. Trevor Tanton)

Job Description:

This job was for the SPUTNIK project (EU funded project), and I was responsible for developing a methodology to estimate the crop water demand from multi-temporal satellite images and then integrate the result in to a GIS interface to manage a large irrigation scheme at Arys-Turkstan, Kazakhstan. The work included field trips and installing a micro-climatic station for calibrating the results from satellite data using the mathematical formula of Penman-Monteith. This project was partially similar to my PhD research.

Concurrently, I was teaching two course in GIS and EIA.

March 2000 – June
2004

PhD student, Civil and Environmental Engineering Department, University of Southampton.

This period was for obtaining the PhD degree, however in the last 18 months I have been engaged in some works such as research developer for 12 months & some remote consultancy to the FAO/UN.

March 1998 –
October 1998

Job Title: GIS Project Manager [F/T]

Employer: CIDA-EEAA (Canadian International for Development Agency & Egyptian Environmental Affairs Agency)

Job Description:

My role was to manage the EEIS project (Egyptian Environmental Information System). This project was co-funded by CIDA (Canadian International for Development Agency) and EEAA (Egyptian Environmental Agency). The main objective of this national project was to build an Environmental Information System covering the whole country (Egypt) focusing on three main themes – water, air and land. GIS system was developed to assess the impact of the pollution on these themes. Remotely sensed data was used as a real time source of information about water and land particularly in the dynamic areas susceptible for rapid changes. Hotspot applications were implemented on the areas causing sever endanger to the surrounding environment. One of these applications was the Industrial Pollution Information System (IPIS) for one of the biggest industrial estates in Cairo (Shubra El-Khima).

August 1997 –
February 1998

Job Title: Researcher [F/T]

Employer: National Authority for Remote Sensing and Space Sciences (NARSS), 23 Josef Tito St., El-Nozha El-Gedidah, Cairo, Egypt

Job Description:

NARSS is a governmental scientific research institute, which is focusing on



the applied research of remote sensing, space sciences and GIS in different disciplines. I was working for the Environmental Studies and Land Use Planning Department. The main research objective of this department is applying the state-of-the-art of remote sensing and GIS in environmental monitoring and land-use mapping. One of the key projects that I have been involved was mapping the land use and land cover classes for the northern Sinai region using high resolution satellite data coupled with field survey.

September 1996 –
July 1997

Job Title: Lecturer [F/T]

Employer: United Arab Emirates University, Faculty of Humanities and Social Sciences, Geography Department, Al-Ain, UAE

Job Description:

My role was to teach undergraduate the following courses:

- Remote Sensing
- Geographic Information Systems
- Principles of Mapping
- Thematic Maps
- Coastal Geomorphology

During this academic year, I have also involved in a research project that aims at studying the flash flood hazardous in the southern region of UAE.

January 1993 –
August 1996

Job Title: Associate Lecturer [F/T]

Employer: Geology Department, University of Mansoura, Egypt

Job Description:

I was teaching the practical courses of Remote Sensing, GIS, and hydrology.

January 1990 –
December 1992

Job Title: GIS Project Manager [F/T]

Employer: The Cabinet, Information and Decision Support Centre (IDSC), Cairo, Egypt

Job Description:

I was managing some GIS projects for sustainable development. My technical duties were including:

- GIS system design
- System analysis
- GIS database structure design
- Applications development
- Remote sensing analysis



Postgraduate Supervision

Dr. Abou El-Magd is supervising four postgraduate students in variable disciplines of geography and geology. They are:

1. **Khalid A.M. AlMonsib - MSc Thesis** “Studying the spatial distribution and the environmental factors of Malaria Disease in Yemen using GIS and Remote Sensing. **Ain Shams University, Faculty of Arts & Humanities, Geography Department - *Awarded***
2. **Abdel Fatah – MSc Thesis** “Urban Sprawl on Agricultural lands in Menofiya Governorate cities A study in Urban Geography using remote sensing and Geographical Information systems”. **Cairo University, Faculty of Arts & Humanities, Geography Department. *Awarded***
3. **Hassan Mohy – MSc Thesis** “Application of Remote Sensing in Mineral Exploration in the Central Eastern Desert of Egypt”–**Cairo University, Faculty of Science, Geology Department. *Awarded***
4. **Hussein AL Kobtan - PhD Thesis** “Improved techniques for geological and sedimentological studies of Lake Nasser. **Banha University, Faculty of Science, Geology Department.**
5. **Soad Mohamed Abouel Yazied – PhD Thesis** “Integration of remote sensing, GIS and hydrological models for the assessment of Flash flood hazards in the Gulf of Suez, Sinai Peninsula, Egypt”. **Alexandria University, Faculty of Arts & Humanities, Geography Department.**
6. **Ahmed Aboel Ela - PhD Thesis** “Detection of coastal changes in the coastal lagoons in the Nile Delta using remote sensing and GIS”, **Mansoura University**
7. **Mohamed Kotb – MSc Thesis** “Hydrogeological and Environmental Studies Of Wadi Feiran, South Sinai, Egypt. Using GIS techniques”. **Menofya University, Faculty Sciences, Geology Department.**
8. **Osman Ebrahim – PhD Thesis**, “Evolution of the Groundwater Resources in the Northern Western Coast of Egypt using Earth Observations Techniques and GIS” **Al Azhar University;**
9. **Noha Zakaria – MSc Thesis** “Comparative geo-environmental studies on the biggest two coastal lakes of the Nile delta, Egypt using remote sensing and GI”, **Mansoura University.**
10. **Naglaa Zanaty – MSc Thesis** “Functioning earth observation technologies to identify and monitor the heat islands over Cairo city, Egypt”, **Port Saeid University**

Peer Reviewing

- Dr. Abou El-Magd is acting as a peer reviewer to some of the international and regional journals such as:
 - International Journal of Geographic Information Science
 - International Journal of Remote Sensing,
 - Journal of Coastal Research,
 - International Journal of Digital Earth
 - Journal of advanced remote sensing
 - Egyptian Journal of Remote Sensing
 - Applied Water Science

**Member of Editorial Board:**

- Dr. Abou El-Magd is acting as member of the editorial board of:
 - Open Journal of Remote Sensing and Positioning
 - African Association of Remote sensing and Environment - AARSE
 - Remote Sensing Open
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Other Qualiications**A) International Consultancy**

Dr. Abou El-Magd has acted as international consultant to these international organizations:

1. United Nation Development Program (UNDP): international consultant for the UNDP Kuwait office for the project entitled Kuwait Integrated Environmental Information Network KIEIN with main focus to develop the environmental indicators for the state of Kuwait and the way of implementation on a web based GIS interface.
 2. World Health Organization (WHO) of the United Nations: International GIS Consultant and Trainer for the capacity building of the Malaria Control Program in Sudan
 3. Food and Agriculture Organisation (FAO) of the United Nations: International GIS Consultant for the project entitled “Sustainable Development for Irrigated Agriculture in Al Hassa, Kingdom of Saudi Arabia (‘UTF/SAU/012/SAU).
 4. Social Fund for Development (SFD), Yemen: International GIS Consultant for the project entitled “Establishment of Enterprise GIS for the Social Fund for Development.
 5. GIS Consulting Solutions (GISCON), German: International Remote Sensing and GIS Consultant for the Company in general Remote Sensing and GIS consultancy to GOs, NGOs and Private sector.
 6. NATO Science for Peace Programme: Project Advisor for the project entitled “Real-Time remote sensing for early warning system & mitigation of disaster and epidemics“ http://www.itap.purdue.edu/pto/NATO_KEEO/partAdvisors_en.html “
 7. UNECA, Geographic information analysis for food security in Africa
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B) Key Skills

- Expereined in teaching under/post graduates
- Experienced in scientific research
- Skilled in supervision, mentoring and coaching
- Expereined in writing research proposals and seeking fund
- Expert in GIS design, application and implementation
- proficent in using remote sensing in irrigation water management
- proficent in using Esri’s GIS packages such as Arc/info and ArcGIS
- proficent in using Erdas Imagine package for image processing and raster



GIS applications

- Highly skilled in training in both academic and personal issues (e.g. GIS, Remote Sensing, project management, leadership, time management,...etc)
- GIS training and presentation of information
- Experience in project handling and management
- Highly skilled in liason with clients
- Experienced in consultancy
- Job descriptions and interviewing
- Training of Trainers (TOTs)

C) Memberships

Organisation	Type of membership	Start date
CIWEM – Council of Science	Chartered Scientist (CSci)	November 2006
CIWEM – Council of Environment	Chartered Environmentalist (CEnv)	November 2006
Royal Geographical Society	Ordinary	March 2005
Egyptian remote sensing society	Acting member	January 1996
AARSE – African Association of Remote Sensing and Environment	Acting member	January 2008
EIS – Africa	Acting member	January 2008
Egyptian Space Committee	Acting member	June 2009

D) Accreditation

Through my membership of CIWEM as Chartered Scientist and Chartered Environmentalist I have been selected as a member of a committee that provide accreditation to graduate courses of remote sensing, GIS and environmental sciences courses to few enrolled universities in UK for accreditation process.

E) Other HR Training Course

I have delivered many Human Resources (HR) training courses to the National Authority for Remote Sensing and Space Sciences as well as other research institutes. This includes:

- Time management
- Presentation Skills
- Mentoring and coaching
- Project Management

Key Publications

1. **Abou El-Magd, I.**, Mohy, H. and Basta, F. (2014) Application of remote sensing for gold exploration in the Fawakhir area, Central Eastern Desert of Egypt, Arab J Geosci, DOI 10.1007/s12517-014-1429-4
2. **Abou El-Magd, I.** and Alzaeny, A., (2014) Quantitative remote Quantitative hyperspectral analysis for characterization of the coastal water from Damietta to Port Said, Egypt, Egyptian Journal of Remote Sensing and Space Sciences.
3. **Abou El-Magd, I.A.**, El Kafrawy, S. and Farag, I. (2014) Detecting Oil Spill Contamination Using Airborne Hyperspectral Data in the River Nile, Egypt. Open Journal of Marine Science, 4, 140-150. <http://dx.doi.org/10.4236/ojms.2014.42014>
4. **Abou El-Magd** and Ali, E.M. (2014) Short-Term Projection of Climate Changes in Sinai Peninsula, Egypt, International Journal of Sci., Tech. & Env., Volume 4, Issue 1.
5. **Abou El-Magd, I.**, Hassan, O. and Arafat, S. (2013) Quantification of sand dune movements in the south western part of Egypt, using remotely sensed data and GIS, International Journal of Geographic Information System, 5(5)
6. El-Gamily, H., Al-Awadhi, N., **Abou El-Magd, I.** And Watkins, D. (2013) "Kuwait Integrated Environmental Information Network: Way of Developing National Environmental Indicators for Better Environmental Information Dissemination", Proceeding of HIMA conference, Kuwait.
7. Hermas, E.A., Leprince, S. & **Abou El-Magd, I.**, (2012) Retrieving sand dune movements using sub-pixel correlation of multi-temporal optical remote sensing imagery, northwest Sinai Peninsula, Egypt, Remote Sensing of Environment, 121, 51-60.
8. Abdel Kawy, W & **Abou El-Magd, I.** (2012) "Use of satellite data and GIS for assessing the agricultural potentiality of the soils South Farafra Oasis, Western Desert, Egypt, Arabian Journal of Geosciences, [DOI 10.1007/s12517-012-0518-5](https://doi.org/10.1007/s12517-012-0518-5).
9. Abdel Kawy, W & **Abou El-Magd, I.** (2012) "Assessing the agricultural potentiality of some soils south el farafra oasis, western desert, Egypt, Arabian Journal of Geosciences, [DOI 10.1007/s12517-012-0519-4](https://doi.org/10.1007/s12517-012-0519-4).
10. **Abou El-Magd, I.** & Ali, E.M. (2011) "Near real-time estimation of the evaporative losses from lake Nasser, Egypt using optical satellite imagery, *International Journal of Digital Earth*, DOI: 10.1080/17538947.2011.586442, 1- 14.
11. **Abou El-Magd, I.**, Hermas E.A. and El Bastawesy, M. (2010) GIS-modelling of the spatial variability of flash flood hazard in Abu Dabbab catchment, Red Sea Region, Egypt, *Egyptian Journal of Remote Sensing*, 13, 81-88. doi:10.1016/j.ejrs.2010.07.010
12. **Abou El-Magd, I.** & Hermas, E.A. (2010) Human Impact On The Coastal Landforms In The Area Between Gamasa And Kitchner Drains, Northern Nile Delta, Egypt, *Journal of Coastal Research*, 26(3).
13. Hermas, E.A., **Abou El-Magd, I.** & Saleh, A.S., (2010) Monitoring lateral channel movements on the alluvial 1 fan of Wadi Feiran drainage basin, South Sinai, Egypt using multi-temporal satellite imagery. *African Journal of Earth Sciences*, [doi:10.1016/j.jafrearsci.2010.02.001](https://doi.org/10.1016/j.jafrearsci.2010.02.001)
14. Ahmed, M.H., Ali, E.M. and **Abou El-Magd, I.**, (2009) Detection of temporal changes in coral reefs at Hurghada (Red Sea, Egypt) and environmental factors controlling deteriorated sites using landsat and field data. *Egyptian Journal of Aquatic Biology and Fisheries*, 13 (4), 403-419.
15. **Abou El-Magd, I.**, (2009) Estimation of the Spatial Distribution of Crop Coefficient (K_c) from Landsat Satellite imagery , *Egyptian Journal of Remote Sensing*, 12, 43-54.
16. **Abou El-Magd, I.** & Hillman P., (2009) Geomorphological Monitoring of Highly Dynamic Estuary Using Oblique Aerial Photographs, *International Journal of Digital Earth*, 2(2), 109-121.
17. Altay, G., Ersoy, O., Abdel Wahab, M., El-Afandi, G., Shokr, M., El-Ghazawi, T., Mohamed, M.A., Eleithy, B., **Abou El-Magd, I.**, Biehl, L., Grant, D. and Rochon, G. (2009) Deployment of Real-time Satellite Remote Sensing Infrastructure to Support Disaster Mitigation: A NATO Science for Peace Collaboration with Research Universities in Turkey, Egypt and the USA, Turkish air force academy-

- aeronautics and space technologies institute, Proceedings of the 4th International conference on recent advances in space technologies
18. **Abou El-Magd, I A,** & Ali, E.M. (2008) Estimating and Mapping Chlorophyll *a* Concentration as a Function of Environmental Changes of Manzala Lagoon, Egypt using Landsat 7 ETM+ Images. *Australian Journal of Basic and Applied Sciences* 2(4), 1307-1314.
 19. **Abou El-Magd, I.A.,** Hermas, E.A. and El-Helow, M. (2008) GIS modelling for strategic planning of regional ring road, Cairo, Egypt. Proceedings of the 7th ARRSE conference, Accra, Ghana.
 20. Hermas, E.A., **Abou El-Magd, I.** & Cherief Omar (2008) assessment of flash flood potential of Abu Dabbab drainage basin, the red sea region, Egypt. Proceedings of the 7th ARRSE conference, Accra, Ghana
 21. **Abou El-Magd, I.** & Faid, A. (2007) Hydrogeological and Environmental Studies on Siwa Oasis, Egypt Using GIS Technique. *Egyptian Journal of Soil Sciences*, 47(4), 435-450.
 22. **El-Magd, I A.,** et al., (2006): Phase III Environmental Impact Assessment of the Mersey Crossing, Halton Borough Council, UK, Internal Report.
 23. **El-Magd, I A.,** et al., (2006): Phase II Environmental Impact Assessment of the Watford Health Campus for the Redevelopment and Masterplanning of Watford General Hospital, Watford Borough Council, UK, Internal Report.
 24. **El-Magd, I A and Tanton, T (2005)** Remote sensing and GIS for estimation of irrigation crop water demand, *International Journal of Remote Sensing*, Volume: 26 (11).
 25. **El-Magd, I A and German, S (2005)** Access-Geodatabase Modelling to Aid Decision Making in River Restoration: Case Study River Beult, Kent, UK, Proceedings of the 19th International Conference Informatics for Environmental Protection (EnviroInfo 2005), Brno, Czech Republic
 26. **El-Magd, I A., (2004)** Real-time crop coefficient from SEBAL method for estimating the evapotranspiration, Proceedings of SPIE Volume: 5232, Remote Sensing for Agriculture, Ecosystems, and Hydrology V.
 27. **El-Magd, I A and Tanton, T (2003)** Improvements in Land Use Mapping for Irrigated Agriculture from satellite Data Using a Multi Stage Maximum Likelihood Classification, *International Journal of Remote Sensing*, Vol., 24 (21).
 28. **El-Magd, I A and Tanton, T (2003)** GIS Modelling for Irrigation Water Scheduling. Proceedings of the GIS Research UK, GISRUK2003, City University, April 2003
 29. **El-Magd, I.A., (2003)** Water resources management and planning; the need for multidisciplinary modelling approaches. IUGG 2003 Scientific Forum, 23rd General Assembly of IUGG and 32nd General Assembly of IASPEI Sapporo, Japan 30 June – 11 July 2003
 30. **El-Magd, I A and Tanton, T (2002)** Remote Sensing and GIS for Irrigation Water Planning. Proceedings of the GIS Research UK 10th Annual Conference GISRUK2002, Sheffield University.
 31. **El-Magd, I A., (2001)** Remote Sensing and GIS Application for Monitoring the Environmental Changes and Water Quality; Case Study of Lake Manzala, Egypt. Proceedings of the GIS Research UK, 9th Annual Conference GISRUK2001, University of Glamorgan.
 32. Abdel-Kader, A F, **El-Magd, I A,** and Hegab, O. A., (1999) Using Remote Sensing and Geographic Information Systems in the Environmental Assessment of Lake Manzala, Egypt. *African Journal of Environmental Assessment and Management (AJEAM)*, Vol 1(2).
 33. Abdel-Kader, AF and **El-Magd, I A., (1998)** Environmental Assessment of Lake Manzala Using Remote Sensing and GIS. National Forum on Support of Remote Sensing Techniques to Planning and Decision Making Processes for Sustainable Development in Egypt; Cairo, Egypt, 8 March 1998. MAP/UNDP, CTM-RAC/ERS.