Academic Curriculum Vitae



Personal Information:

Full Name: Dleen Mohammed Saleh Al-Shrafany Academic Title: Assistant Professor Email: <u>dleen.alshrafany@su.edu.krd</u> Mobile: 00964(0)7505084057



Education:

• 2008 – 2012

PhD in Civil and Environmental Engineering as a major field - Remote Sensing and GIS as a minor field – at Civil Engineering Department, University of Bristol, United Kingdom.

• 2001 – 2004

Msc in Civil Engineering - Remote Sensing field – at Building and Construction Engineering Department, University of Technology, Iraq.

• 1996-1999

BSc in Civil Engineering – Surveying Field – at Surveying Engineering Department, University of Baghdad, Baghdad, Iraq

Employment:

• From 2013 till now

worked at Ministry of Higher Education and Scientific Research / University of Salahaddin / College of Engineering - Department of Geomatics Engineering / Erbil-Iraq

Position held:

- Head of Department (currently)
- Deputy of Dean for scientific and postgraduate Affairs
- Faculty member as a Senior lecturer (Assistant Professor)

• From 2016 till 2019

Partner Owner of Keep Green Company for Environmental Services and Consultations and worked as a team head that responsible on preparing Environmental Impacts Assessment (EIA) reports for different types of investment Projects done in Erbil City as our team were prove the final decision whether the project is environmentally validated or not.

• From 2002 to 2008

worked at Ministry of Higher Education and Scientific Research/ University of Al-Mustansiriyah / College of Engineering - Department of Transportation and Highway Engineering / Baghdad-Iraq.

Position hold:

- Faculty member / Senior lecturer
- Member of Engineering Consultant Bureau at college of Engineering.
- 2000 to 2002

Worked at Al-Tariq Office for Engineering Consultations– Baghdad- Iraq Position hold: Civil Engineer.

Qualifications

Practical and Technical Skills:

- working experience in GIS/ Remote sensing field both as theory and practical experience. I supervised many relevant projects such as:
 - Integration of Terrestrial Laser Scanning and Digital photogrammetry for heritage documentation.
 - 3D Building-Height change detection using aerial and satellite stereo imagery.

- The impact of place quality on enhancing the street liveability Using GIS-GWR analysis model (Case Study Erbil City).
- Pixel-based Image fusion for improving spatial resolution of satellite image.
- 2- I have experience as a trainer and workshop leader for developing and transferring knowledge of particular GIS and Image processing programs (Packages) such as Arc GIS, ERDAS imagine and ENVI. As listed below:
 - Participate in ERASMUS⁺ program on 2018 for 6 months developing a course entitled "Remote Sensing of Environmental Parameters". That course includes sub particular subjects such as: DEM generation and modelling, phenology parameters extraction using TIMSAT and mapping data by ArcGIS, soil moisture estimation by satellite data and LAI (leaf area index) measurement by remote sensing data. I completed the project successfully and got a participation certificate.
 - Participate as a trainer lecturer on 2019 in a 4 weeks GIS training for elections mapping purposes run by the KRI (Kurdistan Region of Iraq) government for planning Ministry's employees.
 - Others: participate and prepare for many other different workshops, training courses about GIS for mapping and evaluation purposes.
- 3- Head of engineering team at Keep Green Company for environmental services and consultations that is a private-based company offers technical solutions to protect and enhance the environment, and ensure public health. The company is based in Erbil, Kurdistan region, Iraq. Directly, I headed the engineering team that responsible on prepare a particular report of (EIA) Environmental Impact Assessment for different categories of investment projects (Oil sector included) in Kurdistan Region. Within this particular task remote sensing in terms of satellite imagery has been used as a preliminary data source tool through interpretation, pre-processing and producing proper map for all the following listed projects as shown below:
 - Adela Van City Project
 - Al-Khayam Business Tower
 - Beren Tower Project
 - Blue Sky Project

- Gulan Drive Project
- Hilton Erbil Project
- Kar Company Building
- Star Marina Project
- Business Tower Project
- Blind Constructions Building Project
- Green World Tower Project
- Kani Factory Project
- Drug Storage Project
- Rock Broken Project
- Steel Factory Project
- Plastic Factory Project

And more other different projects that all relevant environmental issues included site tests and analysis followed by final report submission has been done under my direct supervision.

4- Experience in developing numerical models coupled with land surface models and fusion them with remotely sensed (satellite image) data for surveying and environmental applications.

Teaching experience:

UNDER-GRADUATE LEVEL

- Remote Sensing Fundamentals (Theory and Practical)
- Digital Mapping and GIS (Theory and Practical)
- Digital Image Processing

POST-GRADUATE LEVEL

• Advanced Remote Sensing (Theory and Practical)

- Advanced GIS (Theory and Practical)
- Advanced Image Processing

Research and publications

- 1- Al-Shrafany, D.M.S., Han, and Rico-Ramirez, M.A (2010), Near-surface soil moisture estimation using AMSR-E brightness temperature, International Association of Hydrological Sciences IAHS, based on the Remote Sensing Hydrology Conference that hold on September 2010 in Wyoming, USA.
- 2- AL-Shrafany, D.M.S., Rico- Ramirez, M.A. and Han, D. (2013), Comparative assessment of soil moisture estimation from Land Surface Model and satellite remote sending based on catchment water balance,
- Al-Shrafany, D.M. S., Rico- Ramirez, M.A. and Han, D. (2011), Calibration of roughness parameters using rainfall-runoff water balance for satellite soil moisture retrieval, Journal of Hydrological Engineering, 17 (6), 704-717.
- 4- Srivastava, P.K., Han, D., Rico- Ramirez, M.A., Al-Shrafany, D.M.S and Islam, T. (2013), Data fusion techniques for improving soil moisture deficit using SMOS satellite and WRF-NOAH Land surface model, Water resource Management, 27 (15), 5069- 5087.Meteorological Applications, 21 (3), 521-534.
- 5- Al-Shrafany, D.M.S., Han, D and Rico-Ramirez, M.A., (2015) Soil moisture data fusion of satellite remote sensing and land surface model for hydrological applications, Journal of Hydrological Processes.
- 6- Al-Shrafany, D.M.S., Abdullah, S. H. and Sadeq, H. A. (2020) The use of pixelbased algorithm for automatic change detection of 3D Building from Aerial and Satellite Imagery: Erbil city as a case study, ZANCO Journal of Pure Applied Sciences, (24- 38).
- 7- Al-Shrafany, D.M.S., (2021) Extracting Environmental Phenology Parameters from Satellite Time Series Using TIMESAT and GIS, Anbar Journal of Engineering Sciences, 9(2), 256 - 265.
- 8- Al-Shrafany, D.M.S., Mala, B. A. and Sadeq, H. A. (2019) Integration of Terrestrial Laser Scanning and Digital Close- Range Photogrammetry for Heritage Documentation, ZANCO Journal of Pure Applied Sciences, (168- 175).

- 9- Al-Shrafany, D.M.S., (2021) Soil Moisture retrieval from AMSR-E, Agriculture Water Management (Book Chapter), San Diego, USA, (cha. 13, p.p.241 - 277).
- 10- Al-Shrafany, D.M.S. and Jabar, S. (2022) IHS Image Fusion based on Gray wolf Optimizer (GWO), Anbar Journal of Engineering Sciences, Vol.13. No.1, pp. (65-75).

Professional Social Network Accounts:

- 1- Research Gate: (https://www.researchgate.net/profile/Dleen-Alshrafany?isModalOpen=1)
- Google Scholar

 (https://scholar.google.com/citations?hl=en&view_op=list_works&gmla=AJsN-F6fEIHnRUvN7E7qExCbqy2u2IDfY8zAOXcx5Xq7vJIo2w8EdNC_3WdtOqvTgahrpauuIJodL VCcDj2H9xjWAAnNhTncJg&user=fYu-NLYAAAAJ)
- 3- LinkedIn (<u>https://www.linkedin.com/in/dr-dleen-al-shrafany-8934359a/?originalSubdomain=iq</u>)
- 4- Facebook
 (<u>https://www.facebook.com/dleen.alshrafany</u>)
- 5- ORCID https://orcid.org/my-orcid?orcid=0000-0003-2154-3541