

CURRICULUM VITAE – Dr. A. Hawta Khayyat

Personal Information:

Name: Hawta Khayyat

DOB: 06.29.1977

Married 3 children

Address: 79189 Bad Krozingen, Germany

E-mail: Abdulkareem.khayyat@okstate.edu
hawta.khayyat@felis.uni-freiburg.de



Professional Preparation:

- | | |
|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2012 | Doctorate of Philosophy (Ph.D.) Geography\Geographic Information Systems (GIS), Oklahoma State University, 2012, Unites States of America
Dissertation: "MODELING WIND ENERGY POTENTIAL IN A DATA-POOR REGION: A GEOGRAPHIC INFORMATION SYSTEMS MODEL FOR IRAQ"
(Granted a study leave, to complete Doctoral degree (PhD.) at Oklahoma State University, USA Sep 2006) (Full scholarship) |
| 2010 | Geographic Information Systems – GIS
Certificate, Oklahoma state University, College of arts and Science, Department of Geography, 2010. Unites States of America |
| 2003 | Master of Science M.A Geographic Information Systems/Cartography, Salahaddin University-Erbil, College of Arts and Sciences, Iraq
Thesis: "Problems of the Relief Representation for Rawanduz Area by Using the Satellite Images and Geographical information systems - GIS", July 2003 |
| 1999 | Bachelor of Science B.Sc Geography, Salahaddin University- Erbil, College of Arts and Sciences, July 1998, Iraq.
(Ranked 1 st on 78 class group) |
-

Professional Appointments:

Aug 2022 – Present (Contracted %50)	Academic Staff Member - Consultancy (Geoinformatics) Centre for Renewable Energy Albert-Ludwigs-Universität Freiburg
April 2022 – Present (Contracted %50)	Researcher/Lecturer (GIS, Remote Sensing) Albert-Ludwigs-Universität Freiburg Faculty of Environment and Natural Resources Chair of Remote Sensing and Landscape Information Systems
Feb 2015 – April 2022	Senior Advisor to the Minister – Technical & GIS Kurdistan Regional Government – Iraq, Ministry of Natural Resources (Oil & Gas).
Oct 2012 – Feb 2015	Advisor to the Minister – Technical & GIS Kurdistan Regional Government – Iraq, Ministry of Natural Resources (Oil & Gas).
Jul 2012 – Oct 2012	GIS Consultant Kurdistan Regional Government – Iraq, Ministry of Natural Resources (Oil & Gas).
Feb 2012 – Jun 2012	GIS Developer Oklahoma Wind Power Initiative - Oklahoma, Stillwater, Oklahoma, USA.
Jan 2011 – Feb 2012	Graduate Teaching and Lab Assistant / GTLA Department of Geography, Oklahoma State University Stillwater, Oklahoma, USA
Jan 2009 – Jan 2011	Research and Teaching Assistant Oklahoma Wind Power Initiative – Oklahoma, Stillwater, Oklahoma, USA.
Feb 2006 – Aug 2007	Senior Planner and Surveyor Kurdistan Region Government – Iraq, Ministry of Martyr and Anfal Affair.
Feb 2005 – Feb 2006	Head of University GIS and Remote Sensing Center Salahaddin University- Erbil.
Dec 1999 – Aug 2007	Lecturer Department of Geography, Salahaddin University- Erbil, Erbil, Iraq. (Granted a Full Scholarship for a study leave, to complete Doctoral degree (PhD.) at Oklahoma State University, USA from 2007-2012)

Additional Training:

2015	ArcGis Essentials for Petroleum – GISE, By Petroskills, Houston, USA.
2015	ArcGis Data Management for Petroleum – GISD, By Petroskills, Houston, USA.
2015	ArcGis Coordinate Reference Systems for Petroleum – GISD, By Petroskills, Houston, USA.
2013	Advanced University Level Teaching Methods

Course, supervised by Salahaddin University – Erbil, Continuing Education, Erbil, Iraq, 2013.

- 2011 Web GIS Development, From Oklahoma State University, Stillwater, Oklahoma, 2011.
- 2011 GIS applications in Natural Resources Management, From Oklahoma State University, Stillwater, Oklahoma, 2011.
- 2010 Socioeconomic applications of GIS, From Oklahoma State University, Stillwater, Oklahoma, 2010.
- 2010 Advanced GIS data collection, From Oklahoma State University, Stillwater, Oklahoma, 2010.
- 2004 Trainers Course in (geographical information systems- GIS), ((Course of trainers)), supervised by Oklahoma state University (OSU) & Environmental Systems Research Institute (ESRI), Jordan, Amman, 2004.
- 2004 Trainers Course in (Global Position System- GPS), ((Course of trainers)), supervised by Oklahoma state University (OSU) & Environmental Systems Research Institute (ESRI), Jordan, Amman, 2004.
- 2004 Trainers Course in (Remote Sensing – R.S), ((Course of trainers)), supervised by Oklahoma state University (OSU) & Environmental Systems Research Institute (ESRI), Jordan, Amman, 2004.\

Honors, Awards:

- 2012 Distinctive Graduate Student, Invited speaker (As a Success Story), to “Supporting Iraqi Higher Education”, Iraqi-American Universities Conference, Washington DC. February 22-23.
- 2011 Distinction Award (for Outstanding Scientific Achievement), Ministry of Higher Education and Scientific Research, Iraqi Cultural Office, Washington DC.
- 2010 Membership of Gamma Theta Upsilon (GTU) International Geographical Honor society.
- 2009 Membership of The Golden Key Honor Society.
- 2007 Distinguished Students Full Scholarship to study for PhD. in the U.S.A, Iraqi Kurdistan Regional Government.
- 1998 Outstanding Undergraduate Student at the Geography Department, Salahaddin University- Erbil, Iraq.

Grants:

- Advance GIS training course in Natural Resources, Ministry of Natural Resources, Kurdistan Region Government – KRG March- April 2007, \$ 40,000.
- GIS Survey of Infiltration Karez in Northern Iraq: History and Current Status of Underground Aqueducts. (UNESCO), IQ/2009/SC/RP/1. September 2009, 50,000. (Lightfoot Dale, Khayyat, Hawta,).

Course/Training taught:

Cartography, GIS (ArcGIS & ArcGIS Pro & QGIS), GIS-Natural Resources, GIS applications of Energy, Geographic Analysis, GIS Spatial Analysis.

Memberships:

1. Association of American Geographers
 2. Geographic Information Systems Board (Salahuddin University- Erbil)
 3. Kurdistan Center for Strategic Studies
 4. Gama Theta Upsilon/International Geographical Honor Society
 5. Golden Key International Honor Society
 6. Kurdistan Regional Government – Iraq Board of Electricity Smart Metering System.
-

Publications:

- Khayyat, Abdulkareem hawta & Sarwa Dashti Wahab, Modeling the Suitability Analysis to Establish New Fire Stations in Erbil City Using the Analytic Hierarchy Process and Geographic Information Systems. Journal of Remote Sensing and GIS. Volum 2. Issue 1. 2014.
- Khayyat, Abdulkareem hawta, Lightfoot, Dale, (UNESCO). GIS Survey of Infiltration Karez in Northern Iraq: History and Current Status of Underground Aqueducts. IQ/2009/SC/RP/1. September 2009.
- Khayyat, Abdulkareem hawta. 2006. The environmental dimension to the lack of quantitative and qualitative water resources in Iraq. The first International Environment Conference (A new strategy for the issues of community development and the environment) - Tanta University journal. Tanta. Egypt.
- Khayyat, Abdulkareem hawta. 2005. The economic dimension of rural environment degradation in Iraq. Arabic Organization for Administrative Development Journal. Cairo. Egypt.
- Khayyat, Abdulkareem hawta. 2002. Rural environments and rural development in Iraqi Kurdistan. Gulan Journal issue (33).
- Khayyat, Abdulkareem hawta. 2001. The Geopolitical importance of the population of Iraqi Kurdistan Region ethnographically. Gulan Journal issue (32).
- Khayyat, Abdulkareem hawta. 2000. The political and economic impacts of Food Security in Iraqi Kurdistan Region. Gulan Journal issue (31).
- Khayyat, Abdulkareem hawta, Arif Taifur, A. Kirkuki, A. Jalal, A. Nakshbanddi, H. yasin, S. Mohammed. 2005. Atlas of Kirkuk. 1st ed. Morocco House Press.
-

Sponsored Reports:

1. D. Dale Lightfoot, A.Hawta Khayyat, (2011) A proposal for establishing advanced geographic information systems (GIS) centers for Iraqi Universities. Requested by Iraqi Embassy in Washington DC., Cultural office. December 2011.
2. Muhammad Atruchi, Fattah Rahman, Adel Alkaabi, (2016) Occurrences of metallic deposits in the Kurdistan region – Iraq, A detailed report with a GIS database requested by Kurdistan

Regional Government – Iraq, Ministry of Natural Resources for mineral investment opportunities with KRG Government.

Research Abstracts and presentations, Teaching conferences, and invited Speaker:

- 1- The Association of American Geographers (AAG) Annual Meeting, 2013, Los Angeles, California, with Dr. Steve Stadler (Invited speaker).
- 2- A. Al-Khayyat and S.J. Stadler, “Estimating the Wind Resource in Data-Poor Iraq,” Southwest Association of American Geographers, Las Cruces, NM, October 2012. (Invited speaker).
- 3- “Supporting Iraqi Higher Education”, Iraqi-American Universities Conference, Washington DC. February 22-23, 2012. (Invited speaker).
- 4- The first annual conference of the scholarship students in the HSA in Little Rock – Arkansas, April 23-24, 2011.
- 5- “Karez in Northern Iraq: History and Status of Subterranean Water Technology,” presenter and primary author with A.H. Al-Khayyat, Association of American Geographers Annual Meeting, Washington, D.C., April 2010.
- 6- “Geographic Information System (GIS) for Managing Karez (Qanat) Resources” (with Dr. Dale Lightfoot). Session presented in the training course, “Restoration and Maintenance of Karez in Iraq: Advanced Techniques in Planning, Methodology and Applications,” International Center for Qanats and Historic Hydraulic Structures (ICQHS), Yazd, Iran, December 2009.
- 7- The first international Environmental Conference (A New Strategy for Developing communities and Environment), Tanta University, Egypt, 1-3 April 2006, (Invited speaker).
- 8- Third Arabic Conference for Environmental Management, Sharm El-shekh, Egypt, (November – 2004), (Invited speaker).
- 9- Water Conference, arranged by, FAO, Salahaddin University – Erbil and MOAI, Erbil. (May - 2000), (Invited speaker).

GIS Experience:

Oil and gas GIS data analysis and management (ArcGIS/Pro & QGIS)
Modeling wind energy potential (ArcGIS/Pro & QGIS)
GIS based suitability and optimal site selection analysis (ArcGIS/Pro & QGIS)
Remote sensing and GIS integration researches (ENDVI, suitability analysis...)
GIS Cartography Mapping (ArcGIS/Pro & QGIS)
GIS based GPS data collection and analysis
Online GIS and web applications (ArcGIS server, WORDPRESS)
GIS application in Utility systems (Electricity)

Technical and Specialized laboratory skills:

- 1- Build and publish maps, **ArcSDE** databases, and geoprocessing tools as services in **ArcGIS** Server to streamline existing geospatial procedures.
- 2- Develop GIS application as needed for a variety of applications. Build **ESRI ArcGIS Desktop** tools. Install and configure ArcGIS Server. Responsible for conducting spatial

analysis and creating maps for research projects. Compiling and cleaning of existing or new data and analyzing from a spatial and non-spatial perspective.

- 3- Develop, Design, Update websites with **WORDPRESS**.
- 4- Perform GIS processes including **database development** and management, data manipulation and conversions, and spatial analysis (**ArcGIS & QGIS**).
- 5- Administer, install GIS-related hardware and software including ESRI software and QGIS.
- 6- Manage license and upgrades to GIS and non-GIS software. Assist in the development of GIS coursework for extended education and training.
- 7- Design, Digitize, Scan and edit maps and other geographic Information (ArcGIS and QGIS).
- 8- Collected / Edited available data to prepare requested GIS layer.
- 9- Data Processing (grid and vector data, GDAL/OGR, CAD, DEM etc.) and prepare thematic maps for GIS production with ArcGIS and QGIS.
- 10- Design modeling and advance GIS/Statistical analyses maps outputs with ArcGIS and QGIS.
- 11- Print various size maps on request, using available GIS software.
- 12- Designing and preparing Geodatabases for the map and products as required.
- 13- **Professional Excellent handling** of the following software:
 - ArcGIS/Pro, ArcGIS server, ArcSDE
 - QGIS,
 - SQL server,
 - Microsoft Office (Word, Excel, PowerPoint, Access),
 - IBM SPSS,
 - Adobe Photoshop,
 - Erdas Imaging,
 - ENVI,
 - Surfer
 - Windows OS
 - MAC OS
 - WordPress web development

Recent Roles:

- Producing of high accuracy maps using ESRI ArcGIS and QGIS. Support and development of web map solutions using ESRI ArcGIS Server for MNR oil and gas Portal. Develop web mapping using ESRI ArcGIS Server. Leading a team to develop strategic plans and implement the objectives of the GIS technology needs of the ministry to ensure that GIS capabilities are responsive to the needs of the ministry's growth and objectives.
- Develop GIS web applications and website designing and developing using WORDPRESS.
- Government Official, Management committee member for technical and general management meeting of oil block Licenses of Kurdistan Region of Iraq with Chevron, Rosneft, Hunt Oil, Dana Gas/crescent petroleum, Oryx Petroleum, Talisman, Genel Energy to discuss and evaluate of, material revision related to, Exploration Work Program and Budget, Environmental Impact Assessment, Seismic survey, Dynamic and static modeling Development Plan, production schedule, lifting schedule and Development and Production Work Programs and Budgets; procurement procedures for goods and/or services, for Petroleum Operations.

- Senior member of Electricity Smart Metering project board, Kurdistan Regional Government\Ministry of Electricity. Managing, negotiating, supervising all technical-GIS and installation related subject in ruling the smart metering project in Kurdistan region.

Honors and. Awards:

- 2012: Distinctive Graduate Student, invited speaker (As a Success Story), to “Supporting Iraqi Higher Education”, Iraqi-American Universities Conference, Washington DC. February 22.
- 2011: Distinction Award (for Outstanding Scientific Achievement), Ministry of Higher Education and Scientific Research, Iraqi Cultural Office, Washington DC.
- 2009: Member: Gamma Theta Upsilon (GTU) International Geographical Honor society.
- 2009: Member: The Golden Key Honor Society.
- 2007: Distinguished Students Full Scholarship to study for PhD. in the U.S.A, Iraqi Government.
- 1998: Outstanding Student at the Geography Department, Salahaddin University- Hawler, Iraq.

Volunteer Works:

- Volunteer in 6th Annual International fair: A Multicultural Exploration for Children October 29th 2010, Stillwater, Oklahoma.
- Volunteer in 5th Annual International fair: A Multicultural Exploration for Children November 13th 2009, Stillwater, Oklahoma.
- Volunteer in 4th Annual International fair: A Multicultural Exploration for Children November 21th 2008, Stillwater, Oklahoma.

Language skills:

Fluent in English, Kurdish and Arabic, very good Turkish, Basic German (Progressing).