

Curriculum Vitae

Hossein Helali

Assistant Professor
@ Geomatics Department
Faculty of Civil Engineering
University of Tabriz
email: helali@tabrizu.ac.ir



Education

- 2002 - 2007 Ph.D. in Geospatial Information System (GIS), Dissertation: Multi Map Projection in GIS, KNTU, Faculty of Geomatics Eng.
- 1999 - 2001 Master of Science, Photogrammetry, Thesis in Web-Based GIS, KNTU, Faculty of Geomatics Eng.
- 1994 - 1999 Bachelor of Science at Geomatics Engineering University of Tabriz, Geomatics Dept.

Honors & Awards

- 2007 GIS Exemplary Researcher Award, K.N. Toosi University of Technology
- 2006 Certificate of Participation in Teaching and Learning in Higher Education at Curtin University of Technology
- 2006 Referee of Journal of Cartographica
- 2006 GIS Exemplary Researcher Award, K.N. Toosi University of Technology
- 2002 Ministry of Science and Technology, PhD Scholarship
- 2001 The first rank student in Ph.D. entrance exam

Work Experience

- Since Mar 2007 Consultant: Municipality of Esfahan, ICT Organisation, "GIS Strategy".
- Jan - Feb 2006 Conducting and presenting a seminar for State Managers "Geographic Information Systems in Azar-Bayjane Sharghi State" 16th February, Tabriz, Iran.
- Dec 2005-Feb 2006 Manager of GIS division: Azar Peymayesh Consulting Engineers (APCE) Co.
- May - Nov 2005 Technical Project Manager in KNTU: *GIS Needs Analysis and Conceptual Database Design for Khouzestan Power Industry*.
- Jan - Nov 2005 Project Manager: *GIS Needs Analysis and Conceptual Database Design* for East Azerbaijan Regional Water Authority.
- Oct 2004 - May 2005 Consultant: Iran Small Industries & Industrial Parks Organization (ISIPO).
- May - Sep 2004 Consultant: Ministry of Housing & Urban development, Department of IT.
- 2003 - 2004 Consultant: Municipality of Tehran, 17th Administrative District, "*Quality Assessment of the Traffic Information System*".
- 1995 - 2002 Digital Cartographer: Private Sector Survey.
- 1999 - 2001 Supervisor: GIS & Digital Mapping Lab.
- Nov 1996 - Mar 1998 Manager of Digital Cartography division: Azar-Mohktassat Consulting Engineers Co.
- Nov 1995 - Nov 1996 Digital Cartographer: Azar Peymayesh Consulting Engineers (APCE) Co.

Research Experience

- May 2006-Dec 2006 Visiting Scholar at Department of Spatial Sciences, Curtin University of Technology, WA. Australia
- Feb 2004- Feb 2005 Researcher, KNTU, Faculty of Geomatics Engineering, "*Map Projection Selection And Transformation in GIS*"
- Researcher, KNTU and Ministry of Roads and Transportation, "*Technical and*

Oct 2004- Dec 2005	<i>Economical Feasibility Analysis of Mapping Road Stone Materials to Use on Asphalt, Base, Sub base Ballast and Concert in Iran"</i>
Jun 2003- May 2004	Researcher, KNTU and Ministry of Roads and Transportation, " <i>Tracking and Spatial Information of Vehicles</i> "
Jul 2002- Apr 2003	Team Member, KNTU and Ministry of Roads and Transportation, " <i>Feasibility Analysis of Using Intelligent Transportation System in Iranian Roads Traffic Management</i> "
Jun 2002- Feb 2003	Team Member, KNTU and Transportation and Terminal Organization, " <i>Implementing Web GIS for Iranian Roads</i> ", Project Output: http://www.iranroads.com/
Nov 2001- Dec 2002	Researcher, KNTU, Faculty of Geomatics Engineering, " <i>Feasibility Analysis in Using GPS Dynamic Data in GIS</i> "
Fall 2001	Team Member, KNTU, Faculty of Geomatics Engineering, " <i>Developing a Web Based GIS for the City of Tehran</i> "

PhD Research

Multi Map Projection in GIS (Brief)

It was a new method to handle diversity of Map Projections. The main issue in the research was to develop a conceptual framework, select adequate knowledgebase and software development. An MMP module has developed to select a suitable MP intelligently during the exploring geospatial data.

Master's Thesis (Abstract)

Web-Based GIS, This work was done at Geodesy and Geomatics GIS Lab under the supervision of Dr. A.A. Alesheikh in KNTU, Tehran, Iran. The result was a complete research about Web GIS with interactive map server which could be accessed using any computer on the Intranet with a web browser. The work included software development, coding, and data preparation.

Interests

Web Mapping Services (WMS), Location Based Services (LBS), Map Projection, WMS and Sustainable Development, Intelligent Transportation System (ITS)

Teaching Experience

Mar 2007	Assistant Professor at University of Tabriz, Geomatics Department	
July 2006	Lecture and tutor at Curtin University of Technology, Department of Spatial Sciences <ul style="list-style-type: none"> Spatial Data Handling 	Msc. & Bsc.
2000-2006	Instructor, KNTU, Faculty of Geomatics Eng. <ul style="list-style-type: none"> Principals of Geospatial Information System Internet GIS and Visualization English for Specific Purposes Msc. Thesis co supervisor (2) 	BSc. & Msc.
2000-2006	Instructor, University of Tabriz, Geomatics Department <ul style="list-style-type: none"> Principals of Geospatial Information System Digital Mapping Advance Software and Surveying Instrument BSc. Project supervisor (14) 	BSc.
2003-2005	Instructor, Environmental Management Dept., Graduate School of the Environment and Energy Science and Research Campus, Islamic Azad University <ul style="list-style-type: none"> Geospatial Information System Msc. Thesis cosupervisor (1) 	Phd & Msc
2001 - 2002	Software Instructor <ul style="list-style-type: none"> ArcView; Housing Org., Teaching Assistant in KNTU Compose and GIS Lab. 	Specialists
1997 - 2003	<ul style="list-style-type: none"> AutoCAD, Institute of Jahade-Daneshgahi at University of Tabriz and Housing Org. SDR Mapping, Housing Org., and Engineering Consultants. 	Specialists

Publications

Peer-reviewed Journal Papers

1. Helali, H., J.L Awange and E. Omid, "Using Areal-Scale as opposed to Linear-Scale for Map Applications". Journal of Survey Review, in press.
2. Helali, H., A.A. Alesheikh, B. Voosoghi, "Classification and Modeling Multi Map Projection Parameters in Spatial Database", University of Tehran Journal of Science, Vol 39, No. 5, pp 689-699, 2005.
3. Jazireeyan I., A.A. Alesheikh, H. Helali, "Web GIS Technology Implementation Method Iranian Roads", Journal of Geographic Research, University of Tehran, 2006.
4. Alesheikh, A.A., A. K. Oskouei, F. Atabi, H. Helali, "Providing Interoperability for Air Quality In-situ Sensors Observations using GML Technology", International journal of Environmental Science and Technology, summer 2005, Vol. 2, No 2, pp 133-140.
5. Alesheikh, M., Hamrah, A.A, H. Helali, "Groundwater Potential Modeling Using GIS at the Talesh Water Supply", Journal of Geographic Science Tarbiat Moalem University, No. 2&3, Vol. 3, 2004.
6. Alesheikh, A.A., M.J. Soltani, H. Helali, "GIS Applications in Flood Spreading Site Selection", Quarterly Journal of Geographic Research, Feb. 2003, No 67, pp 11407-11423.
7. Alesheikh, A.A., H. Helali, "Web GIS Development Strategy", GIM International, Netherlands, Nov. 2002, Vol. 16, No 11, pp 12-15.

Contributions at the International Conferences

1. Shojaei, D., H. Helali, A.A. Alesheikh, "Triangulation For Surface Modeling", 9th Symposium on the 3-D Analysis of Human Movement, Valenciennes, France, 2006.
2. Atabi, F., H. Helali, T. H. Farzad, "Real Time Web-Site Application of Air Pollution Information Distribution", Information Technologies in Environmental Engineering (ITEE'2005), Otto-von-Guericke-Universität Magdeburg, Germany, 2005.
3. Alesheikh, A.A., A. K. Oskouei, H. Helali, F. Sedighzadeh, "Design and Implement of Air Quality Information Using GML Technology", Information Technologies in Environmental Engineering (ITEE'2005), Otto-von-Guericke-Universität Magdeburg, Germany, 2005.
4. Helali, H., A. A. Alesheikh, M. Hamrah, "Multi Map Projection in Modern Cartography", XXII International Cartographic Conference (ICC 2005), LA Coruña Spain, 2005.
5. Omid G. E., A.A. Alesheikh, H. Helali, "Developing an Image to Vector Method", Geomatics 84 Exhibition and Conference, National Cartography Center, Iran, 2005.
6. Amirian P., A.A. Alesheikh, H. Helali, "Railway Noise Pollution Modeling Using GIS", Geomatics 84 Exhibition and Conference, National Cartography Center, Iran, 2005.
7. Varshosaz M., H. Helali, D. Shojaei, "Evaluation of the Methods of Triangulation and Effecting Parameters", Geomatics 84 Exhibition and Conference, National Cartography Center, Iran, 2005.
8. Varshosaz M., H. Helali, D. Shojaei, "The Methods of Triangulation", Map Middle East 2005, 1st Annual Middle East Conference and Exhibition on Geospatial Information, Technology and Applications, Dubai, UAE, 2005.
9. H. Helali, A. A. Alesheikh, E. Omid, A. KeshtiArast, "Determination of Accurate Scale; Concept and Computing", Map Middle East 2005, 1st Annual Middle East Conference and Exhibition on Geospatial Information, Technology and Applications, Dubai, UAE, 2005.
10. Jazireeyan I., H. Helali, "Feasibility Analysis of Using Global Positioning System (GPS) For Collecting Dynamic GIS Data", Geomatics 83 Exhibition and Conference, National Cartography Center, Iran, 2004.
11. Helali H., H. Ebadi, S.M. Kalantari, "A Comprehensive Study on LBS Positioning Techniques", 4th International Symposium on Mobile Mapping Technology (MMT'2004) Kunming, China, 2004.
12. Helali H., B. Voosoghi, F. Sedighzadeh, "Intelligent Map Projection Transformation", Challenges in Geospatial Analysis, Integration and Visualization II, ISPRS Commission IV Workshop, Stuttgart, Germany, 2003.
13. Alesheikh A.A., H. Helali, M.A. Chabock, "Dynamic Route Guidance in LBS", GeoInformatics' 2003, the 11th International Conference on GeoInformatics, Advanced GeoInformatics: Linking Pacific Rims to the World, Toronto, Canada, 2003.
14. Helali H., A.A. Alesheikh, E. Mohammadi, M.R. Khaligh Kharazi, "Location Based Services;

Geomatics Approach", Geomatics 82 Exhibition and Conference, National Cartography Center, Iran, 2003.

15. Alesheikh A.A., H. Helali, H.A. Behroz, "Web GIS: Technologies and Its Applications", *International Symposium and Exhibition on 'Geospatial Theory, Processing, and Applications'*, 95th Annual Geomatics Conference of the Canadian Institute of Geomatics (CIG), Ottawa, Canada, 2002.

16. Alesheikh A.A., H. Helali, A.S. Niaraki, M. Varshosaz, "Satellite Location & Navigation of Vehicles on the International Transport Corridor of Iran, Russia and India", International Symposium and Exhibition on 'Geospatial Theory, Processing, and Applications', 95th Annual Geomatics Conference of the Canadian Institute of Geomatics (CIG), Ottawa, ON, Canada, 2002.

17. Helali H., A.A. Alesheikh, "Web GIS Technology Implementation Method", Geomatics 81 Exhibition and Conference, National Cartography Center, IRAN, 2002.

18. Alesheikh A.A., H. Helali, "Distributing National Geospatial Information Resources Using Web GIS", The Digital Earth 2001 Geomatics Conference, Fredericton, Canada, 2001.

19. Helali H., A.A. Alesheikh, "Implementing an Internet-Based GIS for Tehran Municipality", Geomatics 80 Exhibition and Conference, National Cartography Center, Iran, 2001.

Languages

- English Good
- Azari Mother tongue
- Farsi Excellent

References

[B. Veenendaal](#), Associate Professor, Acting Head, Department of Spatial Sciences

Curtin University of Technology, Tel: +61 8 9266 7676, Fx: (+61 8) 9266 2703, email:

B.Veenendaal@curtin.edu.au

[A.A. Alesheikh](#), Associate Professor, GIS Department Chief, Geomatics Engineering Faculty

K.N. Toosi University of Technology, Tel: (+98 21)878 6212, Fx: (+98 21) 88786213, email:

Alesheikh@kntu.ac.ir

Contact

Department of Geomatics

Faculty of Civil Engineering

University of Tabriz, Tabriz, Iran

Tel: +98 411 3392501, Fx: +98 411 3344287

email: helali@tabrizu.ac.ir