



Hassan Emami

Associate Professor

#### Education

Degree	Graduated in	Major	University
BSc	2000	Surveying Engineering	University of Tabriz
MSc	2002	Geomatic Engineering	K. N. Toosi University of Technology
Ph.D	2015	Geomatic Engineering	University of Tehran

#### Employment Information

Faculty/Department	Position/Rank	Employment Type	Cooperation Type	Grade
University of Tabriz	Associate Professor	Tenured	Full Time	21

#### Work Experience

- Vice-Chancellor of Faculty from 2018-2020
- Member of the Virtual Education Committee of University of Tabriz from 2017-2018
- Consultant professor, talented students of the faculty from 2016-2018
- Head of Department at Surveying and Civil Engineering since 2005-2009
- Member of the Faculty's Cultural Committee in 2007-2009
- Member of the Faculty's Cultural Committee in 2016-2018
- Member of the educational council of the faculty since 2004- until now
- The secretary of the working group for the scientific review in the faculty in 2018-2020

#### Awards

- Scientific Secretary of the National Conference of New Geomatics Technologies and Applications
- Member of the Executive and Scientific Committee of the International Conference "New Applications of Geomatics"
- Holding an exhibition of technological ideas and startup projects at Rinotex International

### Festival-2019 Rabe Rashidi

- Participation in the creation of Marand Technical and Engineering Faculty Museum
- Vice-Chancellor of Faculty,
- Advisor professor for talented students
- Member of the Faculty's Cultural Council.
- Member of the faculty's educational council.
- Member of the executive council of the group

## Subjects Taught

### Surveying and geomatics engineering courses

### Papers in Conferences

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1. Emami Hassan ,& Rahmanizadeh Arash ,Introducing a new approach to temperature validation of remote sensing thermal images ,Intercontinental Geoinformation Days (IGD) ,Mersin\_tukish ,2022 06 21.
2. Emami Hassan ,& Bagheri Amir ,Mathematics in Geomatics Engineering: Application to Code Generation of GNSS Satellites ,1st international conference on "Modern Geomatics Technologies and Applications", ,marand ,2021 05 19.
3. Emami Hassan ,& Rostami Seyed Ghasem ,Knowledge Based Method for Land Surface Emissivity and Temperature Retrieval of the Remote Sensing Data ,1st international conference on "Modern Geomatics Technologies and Applications" ,Marand ,2021 05 19.
4. Parvinnejad Davoud , Emami Hassan , Rahmanizadeh Arash ,, Algebraic Aspects of Dimensionality Reduction Techniques on Urban Growth Data ,International conference on commutative Algebra and its Interactions with Algebraic Geometry ,Marand ,2019 10 01.
5. Emami Hassan , Rahmanizadeh Arash , Parvinnejad Davoud ,The Algebraic and its Geometric Aspects in GNSS Point Positioning: A Perspective of Groebner Basis Approach ,International conference on commutative Algebra and its Interactions with Algebraic Geometry ,Marand ,2019 10 01.
6. Rahmanizadeh Arash , Parvinnejad Davoud , Emami Hassan ,Algebraic aspects of Structure Tensor for edge detection in satellite imagery ,International conference on commutative Algebra and its Interactions with Algebraic Geometry ,Marand ,2019 10 01.
7. Hassan Emami ,& Alireza Afary ,Subpixel Classification on the Hyperspectral Images for Accuracy Improvement of Classification Results ,NCC's Conference and Exhibition Geomatic 2007 ,Tehran ,2007-04.
8. Emami Hassan , Fatemi SeyedBager , Mojaradi Barat ,Introducing Correctness Coefficient as an Accuracy Measure for Subpixel Classification Results ,Map Asia, s Largest Conference and Exhibition ,Indonesia ,2005 08 22.
9. Alireza Afary ,& Hassan Emami ,Satellite Image Fusion Using Wavelets Transform ,NCC's Conference and Exhibition Geomatic 2005 ,Tehran ,2005-02.
10. Emami Hassan ,& Valdan Zoej Mohammad Javad ,Evaluation and Decomposition of Mixed Pixels in Remotely Sensed Hyperspectral Images for Accuracy Improvement of Classification Results ,Map India's Largest Conference and Exhibition, announcer ,India ,2003 01 28.
11. Hassan Emami ,& Arash Rahmanizadeh ,Introducing a new approach to temperature validation of remote sensing thermal images ,Intercontinental Geoinformation Days (IGD) ,2022 05 05.

### Papers in Journals

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1. Amir Bagheri ,& Hassan Emami,The Applications of Algebraic Polynomial Rings in Satellite Coding

- and Cryptography, *Mathematics Interdisciplinary Research (MIR)*, Vol. 4, No. 7, pp. 301-329, 2022, Q2.
2. Hassan Emami\* , & Abolfazl Shahamat, Geospatial Groundwater Potential Zone Mapping using Geological, Remote Sensing Data and Multi-Criteria Analysis Techniques, *Journal of Earth Observation and Geomatics Engineering*, Vol. 1, No. 6, pp. 1-15, 2022, Q3.
  3. Hassan Emami \* , & Arastou Zarei, Modelling lake water's surface changes using environmental and remote sensing data: A case study of Lake Urmia, *Remote Sensing Applications: Society and Environment*, 2021, Q1.
  4. Hassan Emami\* , Barat Mojaradi , Abdolreza Safari, The effect of soil salinity on the use of the universal triangle method to estimate saline soil moisture from Landsat data: application to the SMAPEX-2 and SMAPEX-3 campaigns, *International Journal of Remote Sensing*, Vol. 23, No. 38, pp. 6623-6652, 2017, Q1.
  5. Hassan Emami\* , Barat Mojaradi , Abdolreza Safari, A new approach for land surface emissivity estimation using LDCM data in semi-arid areas: exploitation of the ASTER spectral library data set, *International Journal of Remote Sensing*, Vol. 21, No. 37, pp. 5060-5085, 2016, Q1.
  6. Hassan Emami\* , Abdolreza Safari , Barat Mojaradi, Fusion Methods for Land Surface Emissivity and Temperature Retrieval of the Landsat Data Continuity Mission Data, *IEEE Transactions on Geoscience and Remote Sensing*, Vol. 7, No. 54, pp. 3842 - 3855, 2016, Q1.
  7. Hassan Emami , A. Safari , B. Mojaradi, Modified and Adaptation of SEBAL Methodology for Estimating LSE from LDCM Data: Fars Province, Iran, *Journal of Soft Computing and Information Technology*, Vol. 1, No. 5, pp. 27-44, 2015, Q2.
  8. Ali Reza Afary , Mohammad Javad Valdan Zoj , Hassan Emami, A Hybrid Statistical IHS Image Fusion Method, *Journal of Computing and Information Technology*, Vol. 1, No. 4, pp. 29-40, 2013, Q2.
  9. H. Emami\* and B. Mojaradi, A New Method for Accuracy Assessment of Sub-Pixel Classification Results, *American Journal of Engineering and Applied Sciences*, Vol. 2, No. 2, pp. 456-465, 2009, Q4.
  10. Mojaradi, B. , Emami, H. , Varshosaz, M. , & Jamali, S., A novel band selection method for hyperspectral data analysis, *The International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences (ISPRS)*, No. 37, pp. 447-454., 2008, Q2.
  11. H. Emami \* و M. Safari. A Synthesis Method Using Environmental, Geological and Remote Sensing Data in Groundwater Research: A Case Study of Saveh Plain. *Journal of Geomatics Science and Technology*, ۲۰۰۹ ۱۰ ۱۲, Q۲.
  12. Hassan Emami و Amir Rafati. Monitoring and comparing various approaches for short-term forecasting of urban traffic parameters and simulation using GIS. *Journal of Transportation Research*, ۲۰۲۳ ۱۲ ۲۵, Q۲.
  13. Misag Sepehri و Hassan Emami. True orthophoto generation using google earth imagery and comparison to UAV orthophoto. *Scientific - Research Quarterly of Geographical Data (SEPEHR)*, ۲۰۲۳ ۱۲ ۰۲, Q۱.
  14. Hassan emami\* و Abolfazl Shahamat. Geospatial Groundwater Potential Zone Mapping Using Geological, Remote Sensing Data and Multi-Criteria Analysis Techniques. *Earth Observation and Geomatics Engineering*, ۲۰۲۳ ۰۱ ۱۴, Q۲.
  15. Hassan Emami و Seyedgasem Rostami. Analysis and comparison of the exactness of specialist drone-based software products in urban and exurban region. *Scientific - Research Quarterly of Geographical Data (SEPEHR)*, ۲۰۲۳ ۰۱ ۰۳, Q۱.
  16. Hassan Emami و Arash Rahmanizadeh. A Synthesis Approach of Remote Sensing Data and Spectral Libraries to Estimate Land Surface Emissivity. *Journal of Applications of Remote Sensing and GIS in Environmental Sciences*, ۲۰۲۲ ۰۳ ۰۵, Q۲.
  17. Seyyed Ghasem Rostami و Hassan Emami. Verifying the darkening rate of the sky and modeling the best time of the crescent moon sighting. *Scientific - Research Quarterly of Geographical Data (SEPEHR)*, ۲۰۲۲ ۰۲ ۰۵, Q۱.
  18. H. Emami و S. Asadzadeh. A Synthesis Approach for Optimal Determination of Solar and Geothermal Locations Considering Economic, Environmental, and Demographic Criteria Using RS and

GIS Data. *Journal of Geomatics Science and Technology*. ۲۰۲۱ ۰۹ ۰۴. Q1.

19. H. Shariyari و H. Emami. Forest Fire Potential Modeling and Simulation of its Extension Using Remote Sensing Data and GIS: (A Protected Area of Arasbaran). *Journal of Geomatics Science and Technology*. ۲۰۲۰ ۱۲ ۲۰. Q۲.
20. S. Q. Rostami و H. Emami. Modeling of Optimal Distances of Surveying Stations for Monitoring Astable Engineering Structures Using Geodetic Methods. *Geospatial Engineering Journal*. ۲۰۱۹ ۰۳ ۱۵. Q۲.
21. H. Emami \* و A. Jafari. Shadow Geothermal Energy Detection using Integrating of Temperature Anomalies and SEBAL Algorithm. *Journal of Geomatics Science and Technology*. ۲۰۱۸ ۰۶ ۱۰. Q۲.
22. A. Zareei و H. Emami. A New Model for Forecasting Recovery Period of the Urmia Lake Water Level and Assessment of Spatiotemporal Changes of its Stabilization Using Remote Sensing. *Journal of Geomatics Science and Technology*. ۲۰۱۷ ۱۲ ۰۵. Q۲.
23. A. Jafari , F. Samadzadeghan , M. Saadatseresht , H. Emami. ۳D Modeling of Identical Texture and Non-target Rate Objects using Structured Light Method: Design, Construction and Evaluation. *Geospatial Engineering Journal*. ۲۰۱۷ ۰۵ ۱۰. Q۲.
24. H. Emami \* , B. Mojaradi , A. Safari. An Alternative Scaling Method for Cross-Validation of Land Surface Temperature from Remote Sensing Data: A Case Study of Fars Province. *Journal of Geomatics Science and Technology*. ۲۰۱۶ ۱۰ ۰۶. Q۲.
25. H. Emami , M. Saadat Seresht , A. Safari. The Combining of Terrestrial Laser Scanning and Close Range Photogrammetry Data by Projection Matrix to Produce ۳D Models with True Textures. *Geospatial Engineering Journal*. ۲۰۱۶ ۰۶ ۲۰. Q۲.
26. H. Emami \* , A. Safari , B. Mojaradi. An Improved NDVI-Based Multivariate Regression Method for LSE Estimation on LDCM Data. *Journal of Geomatics Science and Technology*. ۲۰۱۶ ۰۶ ۰۸. Q۲.

## Thesis

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1. A synthesis indices-based method for drought assessment of agricultural products using remote sensing data and geospatial information system (Research region: Northwest Iran)
2. Land subsidence Prediction using Machine Learning Methods; Decision Tree and Support Vector Machine
3. Flood susceptibility prediction using artificial neural network

## Books

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1. Understanding least squares estimation and geomatics data analysis
2. Teaching the practical functions of ENVI software in remote sensing and spatial information system engineering
3. Practical adjustment tutorial of control point networks in geomatics engineering
4. Hydrography Surveying
5. Emissivity: Characteristics, Determination and Applications (Book Chapter)
6. Application of Civil 3D in road construction projects
7. Construction and underground Surveying
8. Geodesy and mathematical cartography