



## Roohollah Karimi

Associate Professor

College: Geodesy and Surveying Engineering

### Education

Degree	Graduated in	Major	University
BSc	2001	Surveying Engineering	Amirkabir University of Technology (Tafresh Branch)
MSc	2003	Surveying Engineering-Geodesy	University of Tehran
Ph.D	2010	Surveying Engineering-Geodesy	University of Tehran

### Employment Information

Faculty/Department	Position/Rank	Employment Type	Cooperation Type	Grade
Tafresh University	Department of Geodesy and Surveying Engineering	Tenure Track	Full Time	

### Papers in Conferences

1. Amini H, Pahlavani P, Karimi R ,Detecting and Numerating Vehicles from CCTV Traffic Camera Movies Using a Support Vector Machine ,The 13th international Conference on Traffic and Transportation Engineering ,Tehran, Iran ,2014.
2. Talebi S, Pahlavani P, Karimi R ,Road detection in the purpose of traffic micro simulation based on support vector machines ,The 13th international Conference on Traffic and Transportation Engineering ,Tehran, Iran ,2014.
3. Amini H, Pahlavani P, Karimi R ,3D Reconstruction of Buldings with gabled and hipped structures using Lidar data ,The 1st ISPRS International Conference on Geospatial Information Reseach ,Tehran, Iran ,2014.
4. Ardalan AA, Safari A, Karimi R, AllahTavakoli Y ,Simultaneous solution of the geoid and the surface density anomalies ,EGU General Assembly ,Vienna, Austria ,2012.
5. Ardalan AA, Grafarend EW, Karimi R, Poutanen M ,A new Geodetic Boundary Value Problem approach to high-resolution geoid computations based on relative gravity, geopotential numbers, and

- Mean Sea Level as the boundary data; Case study: Southwest Fin ,EGU General Assembly ,Vienna, Austria ,2008.
6. Ardalan AA, Karimi R, Bilker ,& Koivula M ,A new ellipsoidal Boundary Value Problem approach to telluroid and quasigeoid computations ,EGU General Assembly ,Vienna, Austria ,2008.
  7. Ardalan AA, Karimi R, Sneeuw N ,Application of satellite altimetry derived Mean Sea Level as a boundary data for an iterative gravimetric boundary value problem approach to the Sea Surface Topography and the marine geoid computation ,EGU General Assembly ,Vienna, Austria ,2008.
  8. Ardalan AA, Karimi R ,A minimum distance approach to marine geoid computation ,EGU General Assembly ,Vienna, Austria ,2008.
  9. Ardalan AA, Karimi R, Poutanen M ,A boundary value problem approach to height datum unification ,EGU General Assembly ,Vienna, Austria ,2008.
  10. Karimi R, Ardalan AA ,An iterative Lagrangian approach to Sea Surface Topography and marine geoid computations following exactly the definition of the geoid according to Gauss and Listing ,EGU General Assembly ,Vienna, Austria ,2008.
  11. Ardalan AA, Karimi R ,Precise quasi-geoid map of Iran based on minimum-distance Molodensky telluroid mapping ,EGU General Assembly ,Vienna, Austria ,2007.
  12. Ardalan AA, Karimi R ,On the application of FFT and Wavelet Transform in gravity field modeling (solicited paper) ,EGU General Assembly ,Vienna, Austria ,2006.
  13. Ardalan AA, Karimi R ,Comparison between various existing techniques for computation of geopotential coefficients ,EGU General Assembly ,Vienna, Austria ,2006.
  14. Ardalan AA, Karimi R ,Precise Quasi-Geoid Map Of Iran Based On Minimum-Distance Molodensky Telluroid Mapping ,1st International Symposium of the International Gravity Field Service ,Istanbul, Turkey ,2006.
  15. Ardalan AA, Karimi R ,Gravity field modeling along the leveling lines ,EGU General Assembly ,Vienna, Austria ,2005.
  16. Karimi R, Ardalan AA ,Processing of the observations of precise leveling network of Iran and computations of geopotential numbers for the whole network ,EGU General Assembly ,Nice, France ,2004.
  17. Ardalan AA, Karimi R ,Local gravity field modeling along the precise leveling lines as a way to reduce the need to gravity observations. Case study: Modeling of gravity field along the first order leveling line of Iran ,EGU General Assembly ,Nice, France ,2004.
  18. Ardalan AA, Shirzaii M, Karimi R ,On the robust spectral analysis. Case studies: Tropospheric modeling of the GPS data and Mean Sea Level computation from tide gauge data ,EGS-EGU-EUG Joint Assembly ,Nice, France ,2003.
  19. Ardalan AA, Shirzaii M, Karimi R ,A method for precise estimation of the volume of oil resource via application of first and second derivation of wavelet transformation. Case study: Determination of volume of oil reservoirs in the sou ,EGS-EGU-EUG Joint Assembly ,Nice, France ,2003.
  20. Karimi R, Ardalan AA, Tavakkoli F ,National report on the status of the re-computation of precise leveling of Iran ,23rd General Assembly of the International Union of Geodesy and Geophysics ,Sapporo, Japan ,2003.
  21. Shirzaii M, Ardalan AA, Karimi R ,A method for precise estimation of the volume of oil resources via application of first and second derivatives of wavelet transformation. Case study: Determination of volume of oil reservoirs in the S ,23rd General Assembly of the International Union of Geodesy and Geophysics ,Sapporo, Japan ,2003.

## Papers in Journals

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1. Abdi N, Ardalan AA, Karimi R,Rapid local ionosphere modeling based on Precise Point Positioning over Iran: A case study under 2014 solar maximum,Advances in Space Research,2019.
  2. Sohrabi Athar M, Ardalan AA, Karimi R,Hydrodynamic Tidal Model of the Persian Gulf Based on

- Spatially Variable Bed Friction Coefficient, *Marine Geodesy*, 2019.
3. Mosayebzadeh M, Ardalan AA, Karimi R, Regional improvement of global geopotential models using GPS/Leveling data, *Studia Geophysica et Geodaetica*, 2019.
  4. Ebadi A, Ardalan AA, Karimi R, The Iranian height datum offset from the GBVP solution and spirit-leveling/gravimetry data, *Journal of Geodesy*, 2019.
  5. Abdi N, Ardalan AA, Karimi R, Rezvani MH, Performance assessment of multi-GNSS real-time PPP over Iran, *Advances in Space Research*, 2017.
  6. Karimi R, Ardalan AA, Vasheghani Farahani S, The size, shape and orientation of the asteroid Vesta based on data from the Dawn mission, *Earth and Planetary Science Letters*, 2017.
  7. Karimi R, Ardalan AA, Vasheghani Farahani S, Reference surfaces of the planet Mercury from MESSENGER, *Icarus*, 2016.
  8. Ardalan AA, Karimi R, Effect of topographic bias on geoid and reference ellipsoid of Venus, Mars, and the Moon, *Celestial Mechanics and Dynamical Astronomy*, 2014.
  9. Ardalan AA, Karimi R, On correct application of one-step inversion of gravity data, *Studia Geophysica et Geodaetica*, 2013.
  10. Ardalan AA, Zamzam D, Karimi R, An alternative method for density variation modeling of the crust based on 3-D gravity inversion, *Journal of Applied Geophysics*, 2011, نمایه.
  11. Ardalan AA, Karimi R, Bilker ,& Koivula M, An overdetermined geodetic boundary value problem approach to telluroid and quasi-geoid computations, *Journal of Geodesy*, 2010.
  12. Ardalan AA, Karimi R, Grafarend EW, A New Reference Equipotential Surface, and Reference Ellipsoid for the Planet Mars, *Earth, Moon, and Planets*, 2010.
  13. Ardalan AA, Karimi R, Poutanen M, A bias-free geodetic boundary value problem approach to height datum unification, *Journal of Geodesy*, 2010.
  14. Karimi R, Ardalan AA, An Alternative direct method towards Mean Dynamic Topography computations, *Ocean Dynamics*, 2010.