

# Dr. Ghadi Younis

(PhD) Assoc. Prof.

IGS Associate Member

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## Personal Info

- Sex: Male
- Date of Birth : 01.08.1980
- Place of Birth: Dier-Ghazala – Palestine
- Nationality : Palestinian
- Marital status : Married

## Education

- Oct 2008 – Jan 2013* **Technische Universität Darmstadt**  
PhD, Geodesy , Darmstadt, Germany
- Oct 2004 – Jul 2006* **Karlsruhe University of Applied Sciences**  
MSc., Geomatics, Karlsruhe, Germany
- Sep 1998 – Aug 2003* **Palestine Polytechnic University**  
B.Eng, surveying and Geomatics Engineering, Hebron, Palestin
- Sep 1997 – Jul 1998* **Jenin Secondary Boys School**  
Secondary School, Scientific Branch, Hebron, West Bank, Pale

## Professional Experience

- *Licensed Land Surveyor*, since 2007.
- 2003-2004: *Teaching assistant for Surveying and Geomatics* Eng at PPU, discussions, and Labs: Photogrammetry, Geodesy, and Adjustment.
- 2003: *GIS and Cartography*, Electricity Network Map of Al-Fawwar Camp.
- 2006-2008: *Lecturer for Surveying and Geomatics* Eng at PPU, teaching: Photogrammetry1, Photogrammetry2, digital Photogrammetry, Surveying, GPS, GIS, Geodesy and Adjustment.
- 2009 – 2011: External *Physical Geodesy* Teacher for Master of Geomatics Students.
- 2010: taking apart in the project: Development of a *High capacity Real-Time GNSS* Positioning Service for Moldova (MOLDPOS). [www.moldpos.eu](http://www.moldpos.eu) .
- 2010: GPS/Geodetic Engineer, fixing and testing of the *MOLDPOS GPS-Network* with respect to the Coordinates Transformations and the Accuracy of the calculated coordinates and heights.
- 2008-2012: *Development of DFHRS* at the Hochschule Karlsruhe. [www.dfhbf.de](http://www.dfhbf.de) .
- 2013-Now: *Lecturer for Surveying and Geomatics* Eng at PPU, teaching: Photogrammetry1/2, digital Photogrammetry, Surveying, GIS, GNSS/Geodesy and Adjustment.
- 2013: GIS trainer, Advanced GIS for Cadastral Surveys for the Land Surveying Department.
- 2013-2014 : Project Controller , *Cadastral Surveys* of more than 7,500 Donums in Dura city for the Land Surveying Department.
- 2015: Geometric Correction and Image Processing of *Photogramteric Orthophoto of Hebron* City and Surrounding Area (30x30 km). Positional accuracy transformed from 5m to 0.3m.

- **2016:** Geometric Correction and Image Processing of *Photogrammetric Orthophoto of AL-Dahriyya* City (10x10 km). Positional accuracy transformed from 5m to 0.3m.
- **2017:** (TESLA-project by Erasmus+): Virtual Reality application in higher education in Palestine (GIS and Geography).
- **2018:** (GNSS Service Network – Geodetic) : design of **GNSS CORS network** in Palestine for geodetic infrastructures including ITRF connection and Orbit transformations (GROMA-GeoSystems).
- **2019:** **Real Estate Evaluator**

## Teaching Experience

- **Land Surveying courses (PPU):** Surveying I & II , advanced Plan Surveying
- **Geodesy courses :** Geodesy (PPU) , Physical Geodesy (HS-Karlsruhe) , gravimetry (HS-Karlsruhe)
- **Adjustment :** Theory of Errors I & II (PPU), Adjustment & Statistics (HS-Karlsruhe)
- **GNSS (PPU)**
- **Photogrammetry (PPU):** Photogrammetry I & II , Digital Photogrammetry
- **Scientific Research Methods (PPU)**

[www.researchgate.net/profile/Ghadi\\_Younis](https://www.researchgate.net/profile/Ghadi_Younis)

<https://scholar.google.com/citations?user=7O5dRs8AAAAI&hl=en>

## Journal Articles

Ghadi Younis: *The Effect of Using Multiple Coordinate Systems and Datum Transformations on the Calculated Coordinates in Palestine*. Bulletin of Geography: Physical Geography Series 12/2020, 19(1): 31-41 DOI:10.2478/bgeo-2020-0008

Ghadi Younis: *3D Modelling of Earth Kinematics in Palestine for GNSS and Geodetic Time-Dependent Positioning*. International Journal of Recent Technology and Engineering 09/2019, 8(3):6034-6039 DOI:10.35940/ijrte.C5577.098319

Ghadi Younis: *The Integration of GNSS/Leveling Data with Global Geopotential Models to Define the Height Reference System of Palestine*. ARABIAN JOURNAL FOR SCIENCE AND ENGINEERING 07/2018; 43(7):3639–3645., DOI:10.1007/s13369-017-2912-5

Ghadi Younis: *Practical method to solve large least squares problems using Cholesky decomposition*. Geodesy and Cartography 07/2015; 41(3):113-118., DOI:10.3846/20296991.2015.1086118

Ghadi Younis: *Local earth gravity/potential modeling using ASCH*. Arabian Journal of Geosciences 01/2015; 8(10):8681–8685., DOI:10.1007/s12517-014-1767-2

Jānis Kaminskis, Inese Janpaule, Reiner Jaeger, Ghadi Younis, Ansis Zarins: *DFHRS-based computation of quasi-geoid of Latvia*. Geodesy and Cartography 03/2013; 39(1):11 - 17., DOI:10.3846/20296991.2013.788827

Ghadi K. A. Younis, Reiner Jäger, Matthias Becker: *Transformation of Global Spherical Harmonic Models of the Gravity Field to a Local Adjusted Spherical Cap Harmonic Model*. Arabian Journal of Geosciences 02/2013; 6(2):375–381., DOI:10.1007/s12517-011-0352-1

Jäger R, Kaminskis J, Strauhmanis J, Younis G: *Determination of Quasi-geoid as Height Component of the Geodetic Infrastructure for GNSS-Positioning Services in the Baltic States*. Latvian Journal of Physics and Technical Sciences 01/2012; 49(3).

## Publications

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Reiner Jäger, Ghadi Younis, Simone Kälber: *The New RTCM 3.1 Transformation Messages – Declaration, Generation from Reference Transformations and Implementation as a Server-Client Concept for GNSS-Services*. Bollettino di Geodesia et Scienze Affini 05/2010; 69(2-3):267-297.

### Conference Proceedings

Ghadi Younis: *The Differences Between Land Surveyed Coordinates and the GIS Applied Coordinates in Palestine*. GIS Day 2021 Palestine, Hebron University, Hebron, Palestine; 11/2021

Ghadi Younis: *Finite Element Method for Precise Geoid Modeling for GNSS Positioning in Palestine*. 2nd International Conference on Civil Engineering (ICCE) - Palestine, Bethlehem, Palestine; 11/2019

Ghadi Younis: *The use of Smart Phones for solving Mathematical Problems for Engineering Students*. First National Conference in Teaching and Learning, Hebron, Palestine; 12/2014

V Chiriac, L Nistor-Lopatenco, V Grama, A Iacovlev, R Jager, P Spohn, G Younis: *Development of new geodetic infrastructure in Republic of Moldova*. EUREF Symposia 2011, Chisinau, Moldova; 05/2011

### Thesis

Ghadi Younis: *Regional Gravity Field Modeling with Adjusted Spherical Cap Harmonics in an Integrated Approach*. 01/2013, Degree: PhD, Supervisor: Matthias Becker, Reiner Jäger

Ghadi Younis: *Further development of the L2/ L1-norm GOCA Kalman-filtering DLL and extension to the computation and visualization of variance estimations and probability and forecasting states*. 07/2006, Degree: Master of Science, Supervisor: Reiner Jäger, DOI:10.13140/RG.2.2.24581.96489

Ghadi Younis, Mohammed Tbeisheh: *Geo-map Calculator*. 01/2003, Degree: Bachelor of Engineering, Supervisor: MSc. Kamal Ghatasha, DOI:10.13140/RG.2.2.20807.09127

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## Memberships

- **International GNSS Service:** Associate Member
- Member of the administrative board of Union of TEACHERS AND EMPLOYEES OF UNIVERSITIES AND PRIVATE INSTITUTES : Palestine Polytechnic University - Chapter
- Jordanian Engineers Association
- Member of the administrative board of the Society of Palestinian Survey Engineers
- Palestinian Surveyors Association
- Palestinian Spatial Data Infrastructures Project- Geodetic Committee

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## Scholarships

- 2004-2006: **DAAD** (German Academic Exchange Service) - Master's degree.
- 2008-2013: **DAAD** to complete the PhD. Studies in TU-Darmstadt.

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## Computer skills

- DFHRS : Experienced [www.dfhbf.de](http://www.dfhbf.de)
- GOCA : Very good [www.goca.info](http://www.goca.info)
- CoPaG and CoPaGAXs : Very good [www.geozilla.de](http://www.geozilla.de)
- WTrans : Experienced [www.geozilla.de](http://www.geozilla.de)
- Trimble Business Centre : Very good

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- Leica Geo Office: Very good
  - ArcGIS 10.8 : Experienced
  - QGIS Experienced
  - ERDAS/LPS/StereoAnalyst : Very good
  - Photomodeller – scanner : Very good
  - AgiSoft-PhotoScan/MetaShape: Experienced
  - AutoCAD/ Autodesk Civil 3D : Very good
  - Office : 2003 – 2016 : WORD , EXCEL , POWERPOINT
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## Programming

- Visual C++ : good
  - Visual C++ Visual Basic : very good
  - Maple : very good
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## Languages

- *English* : very good
  - *German* : good
  - *Arabic* : mother language
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