

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, Palestine
- Sep 1997 – Jul 1998* **Jenin Secondary Boys School**
Secondary School, Scientific Branch, Hebron, West Bank, Palestine

Professional Experience

- **2007-Now: 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 .
- **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.dfhb.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**
- 2022-2023 (Al-Kola Cadastral Project- Bani Naim, Hebron): Land Parcelation , Demarkation, GIS Management, Roads Planning, Topographic Mapping using aerial Photogrammetry, earthworks.
- 2023 (Survey of Incomplete Jordanian Cadastral Blocks of Tamoon, Tubas) : finding old parcel border/corner marks of old 14,000 Donums of Jordanian cadastral blocks, resurveying, Georeferencing of scanned block sheets, digitizing and updating block sheets.

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://scholar.google.com/citations?user=7O5dRs8AAAAJ&hl=en>

JOURNAL ARTICLES

Publications

- 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*

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).

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

Memberships

- Nov.2022-Now: Geodetic Advisor for Chairman (Minister) of Palestinian Land Authority.
 - **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
- GOCA : Very good
- CoPaG and CoPaGAXs : Very good
- WTrans : Experienced
- Trimble Bussiness Centre : Very good
- Leica Geo Office: Very good
- Leica Infinity
- ArcGIS 10.8 : Experienced
- ArcGIS Pro : Very good
- 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

www.dfhbf.de
www.goca.info
www.geozilla.de
www.geozilla.de

Programming

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

Languages

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