# MARYAM DANESHFAR

Civil Engineering Institute, Technical University of Berlin

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## PROFESSIONAL EXPERIENCE

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|---|---|
| *2019-Present* | Research Associate<br>**Technical University of Berlin, Berlin, Germany**<br>Task leader: integrating surrounding and environment data in BIM and BEM; 'BIM-SPEED', Horizon 2020 project for BIM-based residential building renovation |
| *2018-2019* | Front-end Web Developer<br>**ORCA Geo services GmbH, Brandenburg an der Havel, Germany**<br>Web application development for clients in the field of agriculture, crop management, plantation management and certification |
| *2016-2018* | Research Assistant<br>**University of Hohenheim, Stuttgart, Germany**<br>Automated delineation of orchard and street-line trees in Baden-Württemberg using photogrammetric aerial photograph |
| *2012-2014* | GIS Analyst<br>**Parsboom Consulting Engineers, Tehran, Iran**<br>Geospatial data management**;** Map drafting**;** Geospatial analysis |

## EUCATION

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|---|---|
| *2019-Present* | Ph.D. Civil Engineering<br>**Department of Civil and Building Systems, Civil Engineering Institute, Technical University of Berlin, Berlin, Germany**<br>Dissertation topic: Effect and integration of surrounding and environmental data in energy-efficient building renovation |
| *2014-2016* | MSc. Applied Geoinformatics<br>**Department of Geoinformatics, University of Salzburg, Salzburg, Austria**<br>Master thesis: Transfer of an analysis workflow from ArcGIS to Grass GIS; The case of forest fire risk assessment under drought conditions |
| *2005-2010* | BSc. Civil Engineering – Geomatics and Surveying<br>**Faculty of Engineering, University of Tehran, Tehran, Iran**<br>Study emphasis: Surveying, Geomatics, Geodesy, Photogrammetry, Remote sensing, GIS, Geosciences, Urban planning |

## SKILL

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| *TECHNICAL SKILLS* | • GIS<br>• Ontology Development<br>• Energy Simulation<br>• System Engineering<br>• Spatial Analysis<br>• Cartography<br>• Geoinformatics | • Geoprocessing<br>• Surveying and mapping<br>• Web development<br>• Web-mapping<br>• BIM<br>• Object-based Image Analysis |
| *TOOLS & TECHNOLOGIES* | • ArcGIS<br>• QGIS<br>• EnergyPlus<br>• Protegé<br>• JavaScript/HTML<br>• Angular<br>• REST API | • Python<br>• R<br>• MATLAB<br>• CAD<br>• Trimble e-Cognition<br>• Microsoft Office |
| *PERSONAL SKILLS* | • Critical thinking<br>• Analysis and problem solving<br>• Teamwork<br>• Adaptability<br>• Task leadership | • Research<br>• Scientific writing<br>• Scientific reviewing<br>• Written and oral communication<br>• Teaching<br>• Supervising |
| *LANGUAGE SKILLS* | • English: Professional working proficiency<br>• German: Intermediate Proficiency<br>• Farsi: Native or bilingual proficiency | |

## TEACHING AND ACADEMIC SERVICES

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| *2021-Present* | *Teaching Assistant*<br>**Technical University of Berlin, Berlin, Germany**<br>Held presentations and student support in *Product Modeling* module (Prof. Dr. Timo Hartmann) |
| *2016-2018* | **University of Hohenheim, Stuttgart, Germany**<br>Held presentations and student support sessions for GIS in *Landscape Ecology* module (Prof. Dr. Klaus Schmieder) |
| *2014-2016* | **University of Salzburg**<br>Student support sessions for *Object-based Image Analysis (OBIA)* module (Prof. Dr. Stefan Lang) |
| *2020-Present* | *Thesis Supervision*<br>**Technical University of Berlin, Berlin, Germany**<br>Master and Bachelor thesis supervision with the topics related to building energy simulation and prediction |
| *2020-Present* | *Reviewing*<br>Reviewing for the journal of *Advanced Engineering Informatics* |

## SCEINTIFIC PUBLICATIONS AND PRESENTATION

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|---|---|
| *2022* | Daneshfar, M., Hartmann, T., & Rabe, J. (2022). An ontology to represent geospatial data to support building renovation. Advanced Engineering Informatics, 52, 101591. |
| *2020* | Daneshfar, M., Hartmann, T., & Rabe, J. (2020). GIS-based ontology for surrounding buildings to support building renovation. LDAC2020 - *8th Linked Data in Architecture and Construction Workshop* |

# REFERENCE

Prof. Dr. Timo Hartmann
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Prof. Jochen Rabe
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