Resume Dr. Eng. Jamil Mohammad Jamil Hamadneh

Marital Status:	Married	Gender: Male
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Email:	jamil.hamadneh@ptuk.edu.ps	Skype: jamilhamadneh
Date of Birth:	June-23-1988	
Nationality:	Palestinian and Jordanian	
Current address:	Asira Ash-Shamaliya, Nablus, Palestine	

Education:

9/2018- 6/2022: Ph.D. in Transport Engineering and Technology, Transportation Engineering & Vehicle Engineering Faculty, Budapest University of Technology and Economics, Budapest, Hungary. (Graduation with Honor).

Dissertation title: The Implications of Integrating Autonomous Vehicles into the Transport System.

1/2012- 3/2016: M.Sc. in Roads & Transports Engineering, Faculty of Graduate Studies, An-Najah National University, Nablus, Palestine.

Dissertation title: Establishing Parking Generation Rates for Selected Land Uses in the West Bank.

9/2006- 12/2010: B.Sc. in Civil Engineering, Faculty of Civil Engineering, An-Najah National University, Nablus, Palestine.

ORCID:	https://orcid.org/0000-0001-8565-1168	
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ResearchGate:	https://www.researchgate.net/profile/Jamil-Hamadneh	

Employment Record:

- 1/2023-present: Palestine Technical University Kadoorie, Ministry of Higher Education and Scientific Research, Tulkarm, Palestine.
 Position Held: Assistant Professor (Full Time).
- 9/2018-6/2022: Budapest University of Technology and Economics, Hungary. Position Held: Teaching Assistant and Ph. D. Candidate (Full Time).
- 1/2015-8/2018: Traffic Higher Council/Ministry of Transport and Communications, Ramallah, Palestine.
 Position Held: Transportation engineer (Full Time).
- 9/2017-8/2018: Birzeit University, Ramallah, Palestine Position Held: Lecturer (<u>Part-time</u>)
- 12/2017-6/2018: Dorsch Gruppe and Universal Group, Ramallah, Palestine Position Held: GIS Expertise (<u>Part-time</u>)
- 1/2011-12/2014: National Center for Sustainable Development (NCD), Nablus, Palestine. Position Held: Roads & Transportation Engineer, Urban Planning Engineer, and GIS Mapping Engineer (Full Time).
- 7/2010-10/2010: Construction & Transportation Research Center (CTRC), An-Najah National University, Nablus, Palestine.
 Position Held: Materials Engineer (Lab and Site) (Part-Time).

Experiences:

9/2018- 4/2022: Department of Transport Technology and Economics, Budapest University of Technology and Economics (BME), Budapest, Hungary

As part of my Ph.D. program, I have been involved in several research works, and academic tasks connected to my research, the department, and my adviser (international coordinator).

- Publishing papers in high number of journals (Q1 to Q3) and conferences at the level of the department.
- Preparing materials for master students (e.g., Tempus and Erasmus) of smart cities and intelligent transport systems courses.
- Lecturer as a teaching assistant of my adviser.
- Supporting my adviser in WISE-ACT (<u>https://wise-act.eu/</u>) project.
- Organizing and preparing hEART conference of 2019 in Budapest, such activities are reviewing papers, logistic and administrative tasks.
- Interviewing international students as part of the admission process at BME, as well as writing questions for admission tests.
- Organizing workshops.
- Participating in research papers in high reputable international conferences, such as IEEE and HCI.
- Participating in workshops locally and internationally.
- Reviewing research works of different journals and conferences in the field of sustainability, travel behavior, micro mobility, and fully automated vehicles.

1/2015- 8/2018: Traffic Higher Council-Ministry of Transport, Ramallah, Palestine

- **Technical member** (Traffic and Transportation Engineer) in comprehensive traffic of metropolitan project of Ramallah-Albireh-Bitonya cities.
- **Technical member and advisor** (Traffic and Transportation Engineer) in the steering committee of the Roads & Transportation Master Plan for Palestine that was prepared by international companies headed by an Italian company (Systematica Srl).
- Member of Traffic Committee (decision maker) at the level of governorates.
- Design and supervision of **many geometric and traffic designs and plans** for different elements of road networks for the benefit of Local Government Units (LGU's) and ministries.
- Providing consultancy support for LGU's engineers in all transportation works (planning, design, and operation).
- Reviewing all traffic plans (planning, design, construction, and operations stages) received from different agencies and institutions, for example, USAID projects, Cities' municipalities, etc.

9/2017- 8/2018: Birzeit University, Ramallah, Palestine.

• Lecturer: **graduation projects course** for bachelor students at the civil engineering department, Faculty of engineering. The teaching activities include teaching new transportation software, traffic operations, pavement structure, geometric design, research techniques, and solving transportation problems at the local and national levels.

1/2011- 12/2014: National Center for Sustainable Development Consulting Firm (NCD). (Email: info@ncsd.ps)

A) Roads & Transportation Engineering Projects

Project Name: Engineering design for local communities in West Bank. The project is sponsored by Global Communities (Formerly CHF) - USAID.

Location: Tubas and Attil cities, Palestine. Year: 1/2014-3/2014

Activities performed: surveying works, geotechnical work (soil pitting and boreholes, etc.), traffic study, geometric design, pavement design, drainage design, cost estimate, and tender documents **Position Held:** <u>Road Engineer (traffic & geometric engineer)</u>.

Project Name: preparing full design of several internal and regional roads in West Bank. The projects were coordinated by the Municipality Development and Lending Fund (MDLF), Ministry of Local Government (MolG) and Local Government Units (LGU's).

Location: Palestine. Year: 1/2012-2/2014

Activities performed: surveying works, geotechnical work (soil pitting and boreholes, etc.), traffic study, geometric design, pavement design, drainage design, cost estimate, and tender documents **Position Held:** <u>Roads Engineer (Traffic & Geometric Engineer).</u>

Project Name: An-Najah National University Hospital internal roads.

Location: Nablus, Palestine. Year: 6/2012-6/2012.

Position Held: Traffic Engineer.

Activities Performed:

- Studying geometric plans of roads and making recommendations.
- Preparing signings and marking plans.

Project Name: Traffic Analysis and Design of Bethlehem network- Bethlehem city, **Location:** Bethlehem, Palestine. **Year:** 11/2011- 12/2011.

Main project features: traffic studies, analysis and planning, traffic control, facilities comprehensive design, performance evaluation, and developing many scenarios and options, and selecting the optimal one.

Position Held: Transportation Modeler.

Project Name: Studying and Developing the Central Business District of Abu-Arish City, Jizan County.

Location: Jizan County, Saudi Arabia. Year: 4/2011-12/2011

Size of Project: Central Business District and its surrounding nodes (Area: 2.2 km *1.6 km) Main project features: traffic studies, analysis and planning, traffic control, facilities comprehensive design, performance evaluation, and developing many scenarios and options, and selecting the optimal one.

Position held: Roads & Traffic Engineer (planning, traffic modeling, and geometric design).

Project Name: Transportation and Highways Analysis and Planning.

Location: Al-Ersal, Ramallah city, Palestine. Year: 5/2011-10/2011

Main project features: traffic analysis studies and planning, and performance evaluation. Position held: <u>Traffic Engineer.</u>

Project Name: Designing of Al-Baloo Park Roads (Al-Bireh Tourism Channel).

Location: West Bank, Palestine. Year: 3/2011-4/2011.

Activities performed: preparing full design by using AutoCAD Civil 3D program, geometric design (plans, profiles, and cross-sections), flexible pavement design, and traffic design (signings and markings plans).

Position held: Roads & Transportation Engineer (designer).

B) Urban Planning Projects

Project Name: Naming and Coding of Buildings and Streets for the Benefits of 16th LGU's in West Bank.

Position Held: GIS specialist, Trainer, Coordinator, and Geo-coding Expert.

Year: 3/2014-6/2015 (Proposed)

Activities performed: activities are not limited to the naming of streets through committees, orientation sessions for stakeholders (training), surveying works, the numbering of buildings and streets using ArcGIS tool, preparing tourist maps, building geo-database, preparing bill of quantities, and coordinating and managing the surveyors.

Project Name: Spatial Data Management & Administrative System.

Location: Anabta, Al Yamoun, Jenin Clusters-West Bank. Year: 2/2014- 2/2015.

Position Held: Coordinator and GIS Engineer.

Activities Performed: diagnosing municipalities' management systems in each infrastructure and managerial sector (roads, water, power, licensing, etc.), geographical works (desktop and web), surveying works, and training on ArcGIS.

Project Name: Joint Physical Planning.

Location: North Nablus Clusters (Sabastya, An-Naqura, Bazarya, Neisf Jbeil, Bazarria, Beit Imrien, and Ijnesinya), and Middle Jenin Clusters (Ajja, Anza, Mirka, Phahma, New Phahma, Az-Zawya, and Ar-Rama), West Bank, Palestine.

Year: 01/2/2012-2015.

Position Held: Roads Engineer, Urban Planner, GIS Mapping Engineer.

Activities performed: preparing the diagnostic report of several municipal sectors, preparing the sectoral assessment report, developing alternatives/scenarios of urban development, preparing the spatial development framework, and designing the master plan, managing workshops/focus groups.

Project Name: Physical Planning/Urban Planning (Total Area 75,000 dunam),

Year: 2010-2015. Location: More than 13 towns in West Bank, Palestine.

Main project features: preparing master plan and diagnostic report.

Position held: <u>Roads Engineer</u>, <u>Urban Planner</u>, <u>GIS Mapping Engineer</u>. **Activities performed**:

- Designing Master Plans using AutoCAD and ArcGIS.
 - Using the applications of GIS in planning.
 - Developing master plan and writing the diagnostic report.
 - Preparing a good database for the planned area.
- Using the updated Palestinian manual procedure in developing master plan.

C) Strategic Development Investment Plan Projects

Project Name: Strategic Development and Investment Plan (SDIP)
Year: 2/2012-7/2012. Location: Salfit, Palestine.
Activities Performed:

Preparing SDIP for Salfit District.
Producing GIS maps.

Position Held: Supporting Staff (Transportation Expert)

Freelancer

A) Urban Planning Projects

Project Name: Updating Physical Planning Manual (PPM)- Procedure and Tools for Physical Planning in the West Bank and Gaza.

Client: MDLF and Ministry of Local Government (MOLG).

Location: Palestine. Year: 10/2012- 2/2013.

Position Held: Supporting Staff (Urban Planner & GIS Engineer).

B) Educational Projects

Project Name: Building database for the Ministry of Education "Atlas Book".
Location: Palestine.
Year: 9/2012-1/2013
Client: Ministry of High Education (MoE).
Position Held: <u>GIS Mapping Engineer.</u>
Activity Performed
Building diagnostic database for the situation of education in West Bank &

- 1. Building diagnostic database for the situation of education in West Bank & Gaza Strip.
- 2. Preparing GIS maps for many topics in education (atlas map).

Research Interests

PhD researcher in the field of transportation engineering, transportation planning, and technology. My research interests are autonomous vehicles, activity chain optimization framework, sustainability, travel behavior, multitasking on board of transport modes, impacts of new technologies on the mobility of people and land-use, micro mobility, transport policy, Mobility as a Service (MaaS), public transport, and social acceptability of future transport technologies.

Publications

- 1. Al-Sahili, K., & Hamadneh, J. (2016). Establishing parking generation rates/models of selected land uses for Palestinian cities. *Transportation Research Part A: Policy Practice*, *91*, 213-222. doi:10.1016/j.tra.2016.06.027
- Etzioni, S., Hamadneh, J., Elvarsson, A. B., Esztergár-Kiss, D., Djukanovic, M., Neophytou, S. N., . . . Pronello, C. (2020). Modeling cross-national differences in automated vehicle acceptance. *Sustainability*, 12(22), 9765. doi:10.3390/su12229765
- Hamadneh, J. (2022). The implications of integrating autonomous vehicles into the transport system. (PhD), Budapest University of Technology and Economics Hungary. Retrieved from http://hdl.handle.net/10890/16992 (10890/16992)
- Hamadneh, J., & Esztergár-Kiss, D. (2019). *Impacts of Shared Autonomous Vehicles on the Travelers' Mobility*. Paper presented at the 2019 6th International Conference on Models and Technologies for Intelligent Transportation Systems (MT-ITS), Poland. doi:10.1109/MTITS.2019.8883392
- 5. Hamadneh, J., & Esztergár-Kiss, D. (2021a). The Effects of Multitasking and Tools Carried by Travelers Onboard on the Perceived Trip Time. *Journal of Advanced Transportation*, 2021,

5597694. doi:10.1155/2021/5597694

- Hamadneh, J., & Esztergár-Kiss, D. (2021b). Evaluating Onboard Multitasking on Mode Choice: Conventional Car and Autonomous Vehicle. Paper presented at the 2021 7th International Conference on Models and Technologies for Intelligent Transportation Systems (MT-ITS), Crete, Greece doi:10.1109/MT-ITS49943.2021.9529335
- Hamadneh, J., & Esztergár-Kiss, D. (2021c). The Influence of Introducing Autonomous Vehicles on Conventional Transport Modes and Travel Time. *Energies*, 14(14), 4163. doi:10.3390/en14144163
- Hamadneh, J., & Esztergár-Kiss, D. (2021d). Modeling Multitasking Onboard of Privately-Used Autonomous Vehicle and Public Transport. Paper presented at the Scientific And Technical Conference Transport Systems Theory And Practice, Poland. doi:10.1007/978-3-030-91156-0
- 9. Hamadneh, J., & Esztergár-Kiss, D. (2021e). *Modeling of Onboard Activities: Public Transport and Shared Autonomous Vehicle.* Paper presented at the International Conference on Human-Computer Interaction, Washington DC, USA. doi:10.1007/978-3-030-78358-7_3
- 10. Hamadneh, J., & Esztergár-Kiss, D. (2021f). *Modeling travel behavior onboard of privately autonomous vehicle and shared autonomous vehicle*. Paper presented at the Trans Motauto World, Varna, Bulgaria.
- Hamadneh, J., & Esztergár-Kiss, D. (2021). Multitasking Onboard of Conventional Transport Modes and Shared Autonomous Vehicles. *Transportation Research Interdisciplinary Perspectives, 12.* doi:10.1016/j.trip.2021.100505
- Hamadneh, J., & Esztergár-Kiss, D. (2021g). Potential Travel Time Reduction with Autonomous Vehicles for Different Types of Travellers. *Promet - Traffic&Transportation*, 33(1), 61-76. doi:10.7307/ptt.v33i1.3585
- 13. Hamadneh, J., & Esztergár-Kiss, D. (2021h). Travel Behavior of Car Travelers with the Presence of Park-and-Ride Facilities and Autonomous Vehicles. *Periodica Polytechnica Transportation Engineering*. doi:10.3311/PPtr.18020
- Hamadneh, J., & Esztergár-Kiss, D. (2022a). Evaluation of the Impacts of Autonomous Vehicles on the Mobility of User Groups by Using Agent-Based Simulation. *Transport*, 37(1), 1-16. doi:10.3846/transport.2022.16322
- 15. Hamadneh, J., & Esztergár-Kiss, D. (2022b). The Impact of Multitasking on Transport Mode Choice *EURO Journal on Transportation and Logistics*. doi:Under Review
- 16. Hamadneh, J., & Esztergár-Kiss, D. (2022c). *The Influence of Spent Time at Park-and-Ride Facility on the Travel Behavior of Workers and Shoppers* Paper presented at the 24th EURO Working Group on Transportation Meeting, Aveiro, Portugal. doi:10.1016/j.trpro.2022.02.091
- 17. Hamadneh, J., & Esztergár-Kiss, D. (2022d). The preference of onboard activities in a new age of automated driving. *European Transport Research Review*. doi:10.1186/s12544-022-00540-7
- Hamadneh, J., & Esztergár-Kiss, D. (2022). The preference of onboard activities in a new age of automated driving. *European Transport Research Review*, 14(1), 15. doi:10.1186/s12544-022-00540-7
- 19. Hamadneh, J., & Esztergár-Kiss, D. (2022e). Preferences of Certain Travelers in Autonomous Vehicle Era. *Journal of Traffic and Transportation Engineering*. doi:Under Review
- 20. Hamadneh, J., & Esztergár-Kiss, D. (2022f). *Preferences of People in the Autonomous Vehicle Age*. Paper presented at the Preferences of People in the Autonomous Vehicle Age, Győr
- 21. Hamadneh, J., & Esztergár-Kiss, D. (2022g). Stakeholder Viewpoint Analysis in the Autonomous Vehicle Industry using Multicriteria Analysis. *Cities*. doi:Under Review
- 22. Hamadneh, J., Szabolcs, D., & Esztergár-Kiss, D. (2022). Stakeholder viewpoints analysis of the autonomous vehicle industry by using multi-actors multi-criteria analysis. *Transport Policy*, *126*, 65-84. doi:10.1016/j.tranpol.2022.07.005
- 23. Hamadneh, J. M. J. (2022). The implications of integrating autonomous vehicles into the transport system.
- 24. Mahdi, A., Hamadneh, J., & Esztergár-Kiss, D. (2022). Modeling of Travel Behavior in Budapest: Leisure Travelers. Paper presented at the 24th EURO Working Group on Transportation Meeting, Portugal doi:10.1016/j.trpro.2022.02.039

- 25. Ortega, J., Hamadneh, J., Esztergár-Kiss, D., & Tóth, J. (2020). Simulation of the Daily Activity Plans of Travelers Using the Park-and-Ride System and Autonomous Vehicles: Work and Shopping Trip Purposes. *Applied Sciences*, 10(8), 2912. doi:10.3390/app10082912
- Polydoropoulou, A., Tsouros, I., Thomopoulos, N., Pronello, C., Elvarsson, A., Sigþórsson, H., .
 Di Ciommo, F. (2021). Who is willing to share their AV? Insights about gender differences among seven countries. *Sustainability*, *13*(9), 4769. doi:10.3390/su13094769

Training Courses

- Training course in Natural Resource Management (NRM) funded by FAO (Food Agriculture Organization), 2011- Jenin.
- Transportation Modeling using Cube 6.1 modules base/Voyager-Milan-Italy.
- Aerodromes Inspector course, European Union Aviation Safety Agency (EASA), Newcastle upon Tyne, October 2015.

Achievements/Certificates

- Change Makers: Shaping the future" organized by Universidad Politécnica de Madrid within the EELISA Unfolds framework held online in Zoom from October 4th to November 8th, 2022.
- Moving Towards New Urban Centralities-Multimodal Stations (Urban integration, mobility measures and technological solution), organized by Universidad Politécnica de Madrid within the EELISA, Madrid, 14-16 October 2021.

Other Professional Qualifications:

- Researcher in the transportation engineering, such as travel behavior, sustainable transport modes, fully automated vehicles, activity-based models, micro mobility, mobility as a service, multi actor multi criteria analysis,
- Multicriteria decision analysis.
- Ability to coordinate and manage conferences.
- Excellent experience in preparing physical planning for towns, villages, and cities with full knowledge of all items mentioned in the Palestinian Physical Planning Manual.
- Good knowledge in the process of strategic planning for cities.
- High qualifications in supervision of roads projects.
- Qualified to prepare transportation construction contract plans.
- Qualified to prepare transportation and highways studies (traffic operation analysis, planning analysis, and design analysis)
- Ability to make good designs for large road projects (geometric, traffic, and pavement road design).
- Competent in ArcGIS software with good knowledge of GIS science (database and maps).
- Ability to quickly adapt to any newly developed transportation software.
- Team player and ability to lead.
- Ability to manage the site and prepare reports.
- Good working ethics and reliable, flexible, and hard-working.

Professional Membership

- Jordan Engineers Association (JEA), Reg. No. 1/2377
- Representative for non-aviation domain of GNSS of Palestine in Euro-Med Program, Ministry of Transport, Palestine, 2016-2018.
- Focal point, National Coordinator of the Electronic Platform of ESCWA-United Nations, Ministry of Transport, Palestine, 2016-2018.

Professional Computer Skills

AutoCAD Civil 3D Desktop, Synchro Studio 8 *Traffic Software*), MS Office, HCS (Highway Capacity Software), ArcGIS, MATSim, VISSIM, VISUM.

Languages

I am Fluent in Arabic (Native Tongue) and in English (Writing, Reading, and Speaking). Basic level in Hungarian language.

Driving License

Valid driving license (Vehicle weight not more than 4 tons).

References

- Domokos Esztergár-Kiss, Senior Research Fellow, Department of Transport Technology and Economics, Faculty of Transportation Engineering and Vehicle Engineering, Budapest University of Technology and Economics (BME), 1111 Budapest, Hungary. Email: esztergar-kiss.domokos@kjk.bme.hu
- Khaled Al-Sahili, Associate Professor of Civil Engineering, Faculty of Engineering and Information Technology, Nablus, Palestine. Email: <u>alsahili@najah.edu</u>
- Lászlóné Tánczos, Full professor, Department of Transport Technology and Economics, Faculty of Transportation Engineering and Vehicle Engineering, Budapest University of Technology and Economics (BME), 1111 Budapest, Hungary. Email: <u>ktanczos@mail.bme.hu</u>