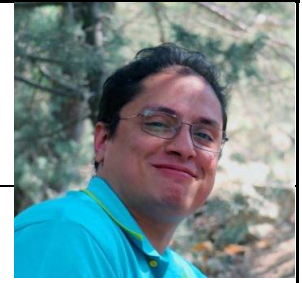# NAVID KHADEMI

Date of Birth: 18/April/1981, Nationality: Iranian, Place of Birth: Tehran

I. CURRENT EMPLOYMENT

University of Tehran

Director since Nov. 2016
Center for transportation studies (CTS), University of Tehran
Lab Director since Nov. 2018
Computer graphics in Civil Engineering (CGC) Laboratory, University of Tehran

&

Associate Professor from March 6, 2013
Department of Transportation Engineering,
School of Civil Engineering,
University of Tehran

16 Azar St., Enghelab Ave., Tehran, Iran; P.O. Box: 1417613131,
Ph.: +98 21 61112991, Fax: +98 21 66403808, Cell-Ph. : +98 9127259280

Emails: navid.khademi@ut.ac.ir
                  navid.khademi@hotmail.com
Univ. homepage: https://rtis.ut.ac.ir/cv/navid.khademi
ORCID: http://orcid.org/0000-0003-2565-8194
Google Scholar: https://scholar.google.com/citations?user=xXaRf2QAAAAJ&hl=en
ResearchGate: https://www.researchgate.net/profile/Navid_Khademi
WOS ResearcherID: D-9945-2018
Scopus Author ID: 55058710100

i. ACADEMIC QUALIFICATIONS AND RESEARCH PERIODS

Post-Doc. (titled as the research mission at UT) September 2015 - June 2016
Le laboratoire Théorie économique, modélisation et applications (THEMA)
UMR, CNRS,
CY Cergy Paris Université,   France
Research Project: "ELITISME (Emploi, Logement, Infrastructures de Transports: Incidences Sociales, Mobilité et Environnement);" A project from ANR (French National Research Agency).

Ph.D. 2006-2012
(4years) Iran University of Science and Technology   Tehran, Iran
(1 year) Centre d'Economie de la Sorbonne (CES),
Ecole Normale Supérieure de Cachan, Université Paris-Saclay   Paris, France

1

Transportation Planning (Top student with GPA: 18.00 /20)
Focus: Day-to-Day travelers' behavior modeling
Thesis topic: "Modeling Travelers' Decision Deviation in a Discrete Choice Space: A Case Study of Railway Mode Choice Modelling"
Supervisor: Dr. Jalil Shahi (jalil@iust.ac.ir); Advisor: Dr. Afshin Shariat Mohaymani (shariat@iust.ac.ir)
Directly responsible leads in the French team:
Dr. Nicolas Coulombel (nicolas.coulombel@enpc.fr) and Dr. Seghir Zerguini (seghir.zerguini@u-bordeaux.fr)

Master of Science (Honours) 2003-2006
University of Tehran   Tehran, Iran
Highway and Transportation Engineering (First class honor with GPA: 18.04/20)
M.Sc. Thesis: "Optimum Selection of an Appropriate Rail Transit System in an Urban Corridor"
Supervisor: Dr. Kambiz Behnia (cbehnia@ut.ac.ir), Advisor: Dr. Jalil Shahi (jalil@iust.ac.ir)

II. HONORS

- Accepted as a **National Exceptional Talent** by the Iran National Elite Foundation, 2012.
- Graduated as the **First class honor** of PhD, 2012.
- Granted and positioned as the **faculty** of the University of Tehran, the top ranked university of Iran, 2009.
- Admitted as **the top one** of the PhD entrance exam after 1 stage written exam and 2-stage oral entrance exams among 94 candidates of top MSc students of Iranian universities, 2006.
- Graduated as the **First class honor** of M.Sc., 2005.
- Accepted as Elite Student Group for the illustrious ranking of the nationwide B.Sc. level to become admitted in MSc without entrance exams, 2003.
- Graduated as the **First class honor** of B.Sc., 2003.
- Admitted through the **student entrance exam** to the High School of National Organization for Development of Exceptional Talents, 1995.
- Admitted through the **student entrance exam** to Guidance School of National Organization for Development of Exceptional Talents, 1991.

III. AWARDS

- Annual **teaching award** for faculty excellence in teaching, *6th University of Tehran Education Festival*, 30th April, 2019
- February 2018, "**Best paper award**", *17th International Conference on Traffic and Transportation Engineering*, Tehran, Iran (paper: Babazadeh, A., Khademi, N., Babazadeh, A. (Feb. 2018). Using an attacker - defender model for transit network vulnerability analysis)
- June, 2015: "**Eugene L. Grant award**", given annually by the Engineering Economy Division of the American Society for Engineering Education to the authors of the best paper in *The Engineering Economist*. The papers were judged on originality, importance of the problem, logic and clarity, and adequacy of proposed solution.
- March 2015: The **student-centered award** of the school of Civil Engineering at the University of Tehran for the 2014-2015 academic year (this award recognizes a faculty

member who has gone beyond the call of duty in being an exceptional mentor, advisor and teacher to students).
- March 2014: The **student-centered award** of the school of Civil Engineering at the University of Tehran for the 2013-2014 academic year (this award recognizes a faculty member who has gone beyond the call of duty in being an exceptional mentor, advisor and teacher to students).

IV. RESEARCH INTERESTS

<u>**Experimental Social Psychology of Travelers and Advanced Econometric Modeling:**</u> Discrete choice models accounting for self-selection, structural equation models, factor analysis, generalized linear models, stated preference studies, hybrid models, and econometric analysis of panel data.

<u>**Transportation Planning:**</u> Network analysis models, departure time choice modelling, mesoscopic-simulation of the transportation network, and day-to-day network modeling.

<u>**Advanced Transportation System Optimization**</u>: Applied integer programming in transportation science, traveling salesman problem (TSP), vehicle routing problem (VRP), network modeling, transportation optimization programming, and meta-heuristic method in transportation network optimization.

<u>**Vulnerability and Robustness Analysis of Road Networks**</u>: Measuring the resiliency of the transportation network against natural or man-made hazards.

<u>**Rail Transportation Modeling**</u>: Determining the quality of service for railway passengers and freight customers, improving the knowledge on the effectiveness and efficiency of capacity management, timetabling, and management and safety of railway operations.

V. PROFESSIONAL EXPERIENCE

<u>**Lab Director,**</u> Computer graphics in Civil Engineering (CGC) Laboratory, University of Tehran, Nov. 2018-Present (https://cgclab.ut.ac.ir/).

<u>**Director,**</u> Center for transportation studies (CTS), University of Tehran, May 2016 – Present (http://ctsut.ir/).

<u>**Associate professors,**</u> Department of Transportation Engineering, School of Civil Engineering, University of Tehran, Feb 2013 – Present.

<u>**Postdoctoral research fellow**</u>, Le laboratoire Théorie économique, modélisation et applications (THEMA), CY Cergy Paris Université,, France, (Research Project: "ELITISME (Emploi, Logement, Infrastructures de Transports: Incidences Sociales, Mobilité et Environnement);" a project from ANR (French National Research Agency)), 2015-2016.

<u>**Senior advisor,**</u> Transport & Fuel Headquarter of the Presidency of Iran, March 2013 – Sept. 2014.

<u>**Project manager**</u>, Center for Railway Research and Education, Iran Railway Company (Research topic: Vulnerability Analysis of the Iranian Railway Network), 2012-2013.

<u>**Technical manager**</u>, Iran University of Science and Technology (Project: Microscopic Modeling and Simulation of Pedestrian Flow in Tehran), 2013-2014.

<u>**Technical manager**</u>, Iran University of Science and Technology (Project: Design of the Emergency Relief Network for Earthquake Crisis in Tehran), 2011-2013.

<u>**Project manager**</u>, Iran University of Science and Technology (Project: Designing IROSWEP (Iran Road Safety Web-Portal): A National Web Portal for Providing and Sharing Domestic Road Safety Information), 2011-2012.

Senior researcher, Iran University of Science and Technology (Project: Calibration of Traffic Engineering Software According to the Traffic Conditions in Tehran), 2011 (6 months).

Researcher, École Normale Supérieure de Cachan-France, (Project: SustainCity (a European commission project)), 2010-2011.

Technical manager, Transportation Department of Tarh-va-Tafakor-Sakhteman-Zigurat Consulting Engineers Company (Project: Study of Traffic Signal Timing of 15 Major Intersections of Tehran), Dec. 2008 to Feb. 2010.

Technical manager, Tarh-e-Haftom Consulting Engineers Company (Project: Comprehensive Studies of Orumiyeh Traffic and Transportation), 2007-2008.

Technical manager and scientific coordinator, Tarh-e-Haftom Consulting Engineers Company (Project: Comprehensive Transportation Study of Gilan Rural Roads Network), 2006-2007.

Transportation engineer, Tarh-e-Haftom Consulting Engineers Company (Project: Feasibility Study of Monorail Transit System in Tehran), 2004-2006.

Transportation engineer, Tarh-e-Haftom Consulting Engineers Company (Project: Comprehensive Transportation Studies of Iran: Road Infrastructures, (METRA/ EGIS (France)), 2003-2004.

VI. FUNDINGS

▪ Developing a Strategic Development Plan for Transit Oriented Development (TOD) to be Used in the Planning Process of Development Projects
> Funding type: Contract
> Start Date: 2020, 15, April.
> Role: Member of the executive team (Share of participation: 15%)
> Funding agency: Ministry of Roads & Urban Development (of Iran)

▪ Performing Consulting Services to Supervise the Project of Reviewing the Comprehensive Transportation Studies of Qom
> Funding type: Contract
> Start Date: 2019, 07, April.
> Role: Co-Lead (with Dr Abas Babazadeh)
> Funding agency: Qom Municipality

▪ National Transportation Master Plan Update: Passenger Trip Generation
> Funding type: Contract
> Start Date: 2018, 17, March.
> Role: Lead
> Funding agency: Ministry of Roads & Urban Development (of Iran)

▪ Feasibility Study and Revision of Urban Road Design Guidelines on the Principles of Sustainable Transportation
> Funding type: Contract shared with university colleagues
> Start Date: 2018, 25, February .
> Role: Member of the executive team (Share of participation: 10%)
> Funding agency: Ministry of Roads & Urban Development

▪ A Methodology for Determining Travel Time of Links in the Tehran Transportation Network using Information Received from Bus Probes

VII. SCHOLARLY ARTICLES

Bababeik, M., Behnia, K., **Khademi, N.** (2020) Increasing the resilience of rail network through the optimal location of relief trains, Journal of Transportation (Pajooheshname Hamlonaghl), Fortcoming (in Persian).

Mahmoudi, S. M., Bagheri, M., **Khademi, N.**, & Shariat Mohaymany, A. (2019) Method for Facility Planning and Layout Design of a Railway Station using Optimization and Simulation, *International Journal of Railway Research*, 6(2), 250-250.

Bababeik, M., Nasiri, M.M., **Khademi, N.**, Chen, A., (2019). Vulnerability evaluation of freight railway networks using a heuristic routing and scheduling optimization model. *Transportation*, 46(4), 1143-1170.

Khademi, N., Saedi-Germi, R., (2019) Latent learning and the formation of a spatiotemporal cognitive map of a road network, *Travel Behaviour and Society*, 14, 66-80.

Saedi-Germi, R. **Khademi, N.**, (2019) Travel time cognition: Exploring the impacts of travel information provision strategies, *Travel Behaviour and Society*, 14, 92-106.

Bababeik, M., **Khademi, N.**, Chen, A., (2018) Increasing the resilience level of a vulnerable rail network: The strategy of location and allocation of emergency relief trains, *Transportation Research Part E: Logistics and Transportation Review*, 119, 110-128.

Khademi, N., Babaei, M., Schmoecker, J. D., Fani, (2018) Analysis of incident costs in a vulnerable sparse rail network – Description and Iran case study, *Research in Transportation Economics*, 70, 9-27.

Bababeik, M., Zerguini, S., Farjad-Amin, M., **Khademi, N.**, Bagheri, M., (2018) Developing a train timetable according to track maintenance plans: A stochastic optimization of buffer time schedules, *Transportation Research Procedia*, 37, 27-34.

Khanmohammadi, M., Bagheri, M., **Khademi, N.**, Ghannadpour, S.F., A security vulnerability analysis model for dangerous goods transportation by rail – Case study: Chlorine transportation in Dallas-Chicago. *Safety Science 110, (B), 230-241.*

Arman, M., **Khademi, N.**, de Lapparent M, (2018) Women's mode and trip structure choices in daily activity-travels: A developing country perspective, *Transportation Planning and Technology 41, 8, 845-877.*

Jonaghani, R.F., Honarparvar, S., **Khademi, N.**, (2018). Short-range prediction of the zone of moving vehicles in arterial networks. ISPRS International Journal of Geo-Information 7, 35.

Rajabi, M., **Khademi, N.**, Foroozandeh, R., Shariat, A., (2018) Travel time reliability analysis of the bus lines using GPS data, *Journal of Transportation Engineering*, Forthcoming, (in persian).

Khademi, N., Choupani, A.A., (2017). Investigating the road safety management capacity: Toward a lead agency reform. IATSS Research, doi: 10.1016/j.iatssr.2017.08.001.

Bababeik, M., **Khademi, N.**, Chen, A. (2017) Vulnerability Analysis of Railway Networks in Case of Multi-Link Blockage, *Transportation Research Procedia-Elsevier*, 22, 275-284.

Babei, M., Schmoecker, J. D., **Khademi, N.**, Ghaffari, A., Naderan, A. (2016) Fixed-route taxi network design problem, *Journal of Advanced Transportation-Wiley*, 50 (6), 1252–1271.

Khademi, N., Babaei, M., Fani, A. (2015) Interurban rail network robustness analysis: Case study of Iran. Book: *Safety and Reliability of Complex Engineered Systems*, Podofillini et al. (Eds). Taylor & Francis Group, London, ISBN 978-1-138-02879-1, 2217-2227.

Foroozandeh, R., Hakimpour, F., **Khademi, N.** (2016) Short term prediction of travel time on links of the network using transit bus positioning system data, Journal of Geomatic Science and Technology, 5 (3), 77-97 (in persian).

Foroozandeh, R., Hakimpour, F., **Khademi, N.** (2015) Determining travel times on arterial links using probe vehicle data, Geospatial Engineering Journal, 6 (4), 47-60 (in persian).

Khademi, N., Balaei, B., Shahri, M., Mirzaei, M., Sarrafi, B., Zahabiun, M., Mohaymany, A. S. (2015) Transportation Network Vulnerability Analysis for the Case of a Catastrophic Earthquake, *International Journal of Disaster Risk Reduction-Elsevier*, 12, 234–254

Khademi, N., Rajabi, M., Mohaymany, A. S., Samadzad, M. (2014) Day-to-Day Travel Time Perception Modeling Using an Adaptive-Network-Based Fuzzy Inference System (ANFIS). *EURO Journal on Transportation and Logistics-Springer*, 5 (1), 25-52.

Abbastabar, S., **Khademi, N.**, Behnia, K. (2014) Economic Evaluation of Public Transit Systems Considering Uncertainties in Interest, Inflation, Exchange Rates, and Construction Period: The Case of the Qom Metro System, *Journal of Transportation Engineering,* 6 (1), 117-144, (in persian).

Khademi, N., Behnia, K., Germi, R. S. (2014) Using Analytic Hierarchy/Network Process (AHP/ANP) in Developing Countries: Shortcomings and Suggestions. *The Engineering Economist-Wiley*, 59 (1), 2-29.

Khademi, N., Rajabi, M., Mohaymany, A. S., Shahi, J. (2013) Deriving Fuzzy Inequalities Using Discrete Approximation of Fuzzy Numbers. *International Journal of Industrial Engineering & Production Research*, 24 (3), 207-216.

Khademi, N., Mohaymany, A. S., Shahi, J., Zerguini, S. (2012) An Algorithm for the Analytic Network Process (ANP) Structure Design. *Journal of Multi-Criteria Decision Analysis-Wiley*, 19 (1-2), 33-55.

Rajabi, M., **Khademi, N.**, Mohaymany, A. S., Shahi, J. (2012) Modeling Drivers' Day-to-Day Route Choice in Uncertain Conditions Using Fuzzy Sets Theory. Journal of Transportation Engineering, 3 (1), 29-41 *(in Persian)*.

Zerguini, S., **Khademi, N.**, Shahi, J. (2011) Variability of Travel Time, Users' Uncertainty, and Trip Information. *Transportation Research Record: Journal of the Transportation Research Board*, 2254 (-1), 160-169.

Khademi, N., Mohaymany, A., Shahi, J. (2010) Intelligent Transportation System User Service Selection and Prioritization. *Transportation Research Record: Journal of the Transportation Research Board*, 2189 (-1), 45-55.

Khademi, N., Sheikholeslami, A. (2010) Multicriteria Group Decision-Making Technique for a Low-Class Road Maintenance Program. *Journal of Infrastructure Systems-ASCE*, 16 (3), 188-198.

VIII. FORTHCOMING OR UNDER-REVIEW JOURNAL ARTICELS

Khademi, N., Bababeik, M., Faani, A. Measuring the consequences of unintentional incidents: A vulnerability analysis approach for sparse rail networks, *Scientia Irania* (under review).

IX. REFEREED CONFERENCE PROCEEDINGS

Ghavidel, M., **Khademi, N.**, Samani, E. B., & Milani, S. (2020). Travel Time Variability Analysis for Bluetooth Sensor Data in Highways. 8th International Conference on Transport Network Reliability (INSTR), Stockholm (24-26 June, 2020).

Firoozi-Yeganeh, S., Malekzadeh, H., **Khademi, N.**, (2020) Investigating the Factors Affecting Student's Long-Term Trip choice Using Hybrid Choice Models, *18th International Conference on Traffic and Transportation Engineering*, Tehran, Iran (in Persian).

Bagheri, M., Bazeghi-Kisomi, P., Tadayon, A., Pourahmadi, V., **Khademi, N.**, Amirshahi, A., (January 2019) A two-objective optimization model for locating service facilities at Railway station using Pedestrian behavior simulation, Case Study: Tehran Railway station, *98th Annual Meeting of the Transportation Research Board* (Forthcoming).

Khademi, N., Saedi, R. (January 2019) Getting Knowledge without Through Experiencing: Exploring the Phenomena of Driver's Latent Learning, *98th Annual Meeting of the Transportation Research Board* (Forthcoming).

Khademi, N., Saedi, R. (January 2019) Exploring the Impact of Travel Information Provision Strategies on Travel Time Cognition, *98th Annual Meeting of the Transportation Research Board* (Forthcoming).

Arman, M., **Khademi, N.**, de Lapparent M. (January 2019) Activity-Travel Analysis of Women in a Patriarchal Society with Strong Gender Norms, *98th Annual Meeting of the Transportation Research Board* (Forthcoming).

Bababeyk, M., **Khademi, N.**, Kalantari, H., Sadrabadi, H. A. (April 2018). Locating Relief Vehicles (Rescue Trains) in the Railroad Network of Iran. *10th National Congress on Civil Engineering*, University of Tehran, Tehran, Iran (in Persian, forthcoming).

Babazadeh, A., **Khademi, N.**, Babazadeh, A. (April 2018). Defender-Attacker-Defender Model (DAD) to investigate the vulnerability of the rail transport network connected to a semi-flexible bus system. *10th National Congress on Civil Engineering*, University of Tehran, Tehran, Iran (in Persian, forthcoming).

Farjadamin, M., Bababeik, M., **Khademi, N.**, Bagheri, M. (April 2018). Modification of the scheduling of train movements in the single-axle rail according to the line maintenance program. *10th National Congress on Civil Engineering*, University of Tehran, Tehran, Iran (in Persian, forthcoming).

Farjadamin, M., Bababeik, M., **Khademi, N.** (Feb. 2018). Adjusting Train Timetable According to Railway Track Maintenance Plan, *17th International Conference on Traffic and Transportation Engineering*, Tehran, Iran (in Persian).

Babazadeh, A., **Khademi, N.**, Babazadeh, A. (Feb. 2018). Using an attacker - defender model for transit network vulnerability analysis, *17th International Conference on Traffic and Transportation Engineering*, Tehran, Iran (in Persian).

Farjadamin, M., Bababeik, M., **Khademi, N.** (April 19 & 20, 2017). A review of the rail traffic timetable adjustments in the event of disturbances in the rail network. *10th National Congress on Civil Engineering*, Sharif University, Tehran, Iran (in Persian).

Babazadeh, A., **Khademi, N.**, Babazadeh, A. (April 19 & 20, 2017). Formulation of the problem of transit assignment in uncertain conditions and providing an algorithm for solving it. *10th National Congress on Civil Engineering*, Sharif University, Tehran, Iran (in Persian).

Khademi, N., Bababeik, M., Almotahari, AM. (April 19 & 20, 2017). Impact of urban transport network disruptions in the process of passengers' departure time planning, *10th National Congress on Civil Engineering*, Sharif University, Tehran, Iran (in Persian).

Khanmohammadi, M., Bagheri, M., **Khademi, N.** (April 19 & 20, 2017). Identification of Critical Areas in the Rail Transport Network of Dangerous Goods: Transportation of LPG

in the corridor of Isfahan to Zahedan. *10th National Congress on Civil Engineering*, Sharif University, Tehran, Iran (in Persian).

Foroozandeh, R., **Khademi, N.**, Hakimpour, F. (Nov. 15-16, 2016) Real-Time Link Travel Time Estimation: Using Buses as Traffic Probes, International Research Conference on Civil, *Transportation and Environmental Engineering (RCCTEE-16)*, Kuala Lumpur Malaysia.

Bababeyk, M., **Khademi, N.**, Behnia, K. (May 16 & 17, 2016). Analysis of the vulnerability of rail transport networks against multiple disruptions. *3rd Comprehensive Conference on Disaster Management and HSE*, Tehran, Iran.

Bababeyk, M., **Khademi, N.**, Behnia, K. (March 01 & 02, 2016). Vulnerability Analysis of Railway Networks in Case of Multi-Link Blockage. *15th International Conference on Traffic and Transportation Engineering*, Tehran, Iran.

Khademi, N., Almotahari, A., Bababeyk, M., Behnia, K. (March 01 & 02, 2016) Impacts of disruptions in transportation networks on departure pattern of travelers. *15th International Conference on Traffic and Transportation Engineering*, Tehran, Iran.

Khademi, N., Almotahari, A., Bababeyk, M., Behnia, K., (March 01 & 02, 2016) Robustness analysis of road transportation networks. *15th International Conference on Traffic and Transportation Engineering*, Tehran, Iran (in Persian).

Khademi, N., Almotahari, A., Bababeyk, M., Behnia, K. (March 01 & 02, 2016) A taxonomic review to recognize the cause and mechanism of transportation network disruptions and analyze the vulnerability of the network after the damage. *15th International Conference on Traffic and Transportation Engineering*, Tehran, Iran (in Persian).

Khademi, N., Saedi-Germi, R. (March 01 & 02, 2016) Travel time cognition and latent (unconscious) learning. *15th International Conference on Traffic and Transportation Engineering*, Tehran, Iran.

Khademi, N., Saedi-Germi, R. (March 01 & 02, 2016) Traveler information provision strategies (visual, aural, textual, or multimodal) and their effects on the cognition of time. *15th International Conference on Traffic and Transportation Engineering*, Tehran, Iran.

Khademi, N., Saedi-Germi, R. (March 01 & 02, 2016) Cognitive map of the transportation network. *15th International Conference on Traffic and Transportation Engineering*, Tehran, Iran.

Khorami, H., **Khademi, N.**, Babazadeh, A. (November 11 & 12, 2015) Modeling the Departure Time Choice using Discrete Choice Models: Case Study of Mashhad, *7th Urban Planning and Management Conference*, Iran (in Persian).

Khademi, N., Saedi-Germi R., Kalantari, H., Razini, E.A. (November 14 & 15, 2015) Optimal utilization of the rail network capacity: Modeling the cost of combined road and rail systems in the multi-modal transportation network, *17th International Conference on Rail Transportation*, Tehran, Iran (in Persian).

Khorami, H., **Khademi, N.**, Babazadeh, A. (October 8, 2015) Modeling the start time of daily trips using the multiple logit model. *National Conference on Architecture, Engineering, and Urban Development,* Babolsar, Iran (in Persian).

Foroozandeh, R., Hakimpour, F., **Khademi, N.** (June 7, 2015) Using information from smartphones for automatic monitoring of traffic conditions on urban highways. *First National Conference on Sustainable Urban Development*, Tehran. Iran (in Persian).

Foroozandeh, R., Rajabi, M., **Khademi, N.** (August 17 & 18, 2015) Evaluating the level of service of public-bus transit system in Tehran in terms of daily and weekly changes of passenger travel time, *First Iranian Conference on New Horizons in Geographical Sciences, Architecture and Urban Planning*, Iran (in Persian).

Foroozandeh, R., Rajabi, M., **Khademi, N.** (August 17 & 18, 2015) Determining the travel time in urban arteries using the position information detectors installed on the municipal bus fleet, *First Iranian Conference on New Horizons in Geographical Sciences, Architecture and Urban Planning*, Iran (in Persian).

Babaei, M., **Khademi, N.**, Zahabiun, M., Sanaeiha, J., Mostofian, M., Kheradmand, M., Pourhossein, E., Amiri, M. (February 24 & 25, 2015) A Hybrid Method for Multiple-criteria Decision Making under Uncertainty, Applied for Modifying Intersections' Geometric Design. *14th International Conference on Traffic and Transportation Engineering*, Tehran, Iran (in Persian).

Foroozandeh, R., **Khademi, N.**, Hakimpour, F. (February 24 & 25, 2015) Determining travel time of signalized arterial links using bus probe and signal timing data. *14th International Conference on Traffic and Transportation Engineering*, Tehran, Iran (in Persian).

Khademi, N., Almotahari, A., Bababeyk, M., Behnia, K. (December 30 & 31, 2014) Transportation Vulnerability Analysis: A Taxonomic Review. *2nd National Conference on Disaster Management and HSE*, Tehran, Iran (in Persian).

Khademi, N., Bababeyk, M., Behnia, K., Almotahari, A. (December 30 & 31, 2014) Vulnerability Analysis of National Railway Network. *2nd National Conference on Disaster Management and HSE*, Tehran, Iran (in Persian).

Foroozandeh R., **Khademi, N.**, Hakimpour, F. (May 24 & 25, 2014) Travel Time Estimation of Highway Network Links Using Probe Vehicle Data. *21th National Geomatic Conference*, Tehran, Iran (in Persian).

Abbastabar, S., **Khademi, N.**, Behnia, K. (May 7 & 8, 2014) Economic Evaluation of Rail Mass Transit Systems Using Equivalent Uniform Annual Values and Considering Uncertainties in the Actual Rate of Return. *8th National Conference on Civil Engineering*, Babol, Iran (in Persian).

Abbastabar, S., **Khademi, N.**, Behnia, K. (February 25 & 26, 2014) Economic Evaluation (Benefit-Cost Analysis) of Mass Transit System Projects: Making a Comparison between Iran's and Developed Countries' Methods. *13th International Conference on Traffic and Transportation Engineering*, Tehran, Iran (in Persian).

Khademi, N., Kalantari, H., Sadrabadi, H. A. (October 28 & 29, 2013) Passenger Rail Network Robustness Analysis. *15th International Conference on Rail Transportation, Tehran*, Iran (in Persian).

Rajabi, M., Mohaymany, A. S., **Khademi, N.** (February 19 & 20, 2013) An Overview of the Vehicle Routing Problem: Fundamentals and Future Prospects. The *12th International Conference on Traffic and Transportation Engineering*, Tehran, Iran (in Persian).

Khademi, N., Rajabi, M., Zahabiun, M., Jalali, M., Mohaymany, A. S. (May 15-17, 2012) IROSWEP: A National Web Portal for Providing and Sharing Domestic Road Safety Information. *3rd International Traffic Accident Conference*, University of Tehran, Tehran, Iran.

Khademi, N., Mohaymany, A. S., Rajabi, M. (2012) Traveler's Travel Time Perception Modeling Using an Adaptive-Network-Based Fuzzy Inference System (ANFIS). *11th International Conference on Transportation and Traffic Engineering*, Tehran, Iran (in Persian).

Zerguini, S., **Khademi, N.** (2-3 Février, 2011) La Variabilité des Temps de Déplacement: Élaboration d'un Modèle de Valorisation et Conséquences dans le Calcul Économique. *Congrès International ATEC-ITS*, Paris, France (in French).

Behnia, K., **Khademi, N.** (2007) Selecting the Most Appropriate Decision Alternatives for the Feasibility Study of the Tehran Monorail System, *National Conference on Rolling Stock Industry*, Sharif University, Tehran, Iran (in Persian).

Behnia, K., Shahi, J., **Khademi, N.** (2007) Evaluation of Mass Transit Systems in Tehran (in Persian). *7th National Conference of Transportation and Traffic of Iran*, Transportation and Traffic Administration of Tehran, Iran (in Persian).

Behnia, K., Shahi, J., **Khademi, N.** (2006a) Evaluation of the effectiveness of Monorail Systems as an Urban Transit. *7th International Congress on Civil Engineering*, Tarbiat Modares University, Tehran, Iran (in Persian).

Behnia, K., Shahi, J., **Khademi, N.** (2006b) The role of Cost/Capacity attribute in urban transit system selection. *7th International Congress on Civil Engineering*, Tarbiat Modares University, Tehran, Iran (in Persian).

X. INTERNATINAL RESEARCH PROFILE

– **2015-2016**: Working at laboratoire Théorie économique, modélisation et applications (THEMA) of the Université de Cergy Pontoise (France) on the project entitled "ELITISME", which was a project from ANR (French National Research Agency). The project was coordinated by the University of Cergy-Pontoise (UCP), which worked in the domain of transportation and urban economics, and associated ENS-Cachan, with researchers specialized in discrete choice modeling and public policies, and Ecole Polytechnique, which played a major role in the management of large data sources and data collection. This collaborative project involved scholars from France, Europe, USA, and Australia.

– **2011-2013**: Regular meetings, cooperation, and information exchange with the team from the Japan International Cooperation Agency (JICA) in the project entitled: "Design of Network Emergency Relief for Earthquake Crisis in Tehran."

– **2010-2011**: Researcher in the *SustainCity Project* (a European Commission Project) and working collaboratively along with the teams from Switzerland (ETHZ, EPFL), France (ENSC, INED, UCL), Belgium (UCL, KUL, STR), Greece (NTUA), Germany (TUB), Italy (BU), and USA (Berkeley)

– **2003-2004**: Working with an Iranian company in collaboration with EGIS company of France in the project entitled: *Comprehensive Transportation Studies of Iran: Road Infrastructures*.

XI. TEACHING AND MENTORING EXPERIENCE

1.Undergraduate (University of Tehran):
812001702: Statistics (2018/19-S1, 2019/20-S1, 2020/21-S1)
810213601: Railway Engineering (2013/14-S2, 2014/15-S1, 2014/15-S2, 2016/17-S2, 2017/18 S2, 2019/20 S2)
810230901: Transportation Planning (2013/14 S2, 2014/15 S2, 2016/17 S1)
810231101: Traffic Engineering (2013/14 S1, 2014/15 S1)
810202701 Engineering Economy (2016/17 S1&S2, 2017/18 S1&S2, 2018/19 S1&S2, 2019/20 S1&S2, 2020/21 S1&S2)

2.Postgraduate (University of Tehran):
a.Only PhD:

810270101 Urban Transport Modelling (2013/14 S1, 2014/15 S1)

b.MSc & PhD:

810205701 Urban Transportation Planning (2019/20-S1, 2020/21-S1)

810254301 Advanced Statistical and Econometric Methods in Transportation Science (2016/17 S2, 2017/18 S2)

810209201 Operation Research (2014/15 S1, 2016/17 S1)

810213601: Railway Engineering (2012/13 S2, 2013/14 S1)

810215001 Risk Analysis, Uncertainty, and Reliability in Transportation Engineering (2014/15 S2)

3. "Urban Transport Management Training Course" for transportation managers and experts of Iran's new (satellite) cities (2015, Isfahan city of Iran)

Conventional and New Transit sysmes for Satellite cities of Iran (2010)

4. Courses at Sanjesh takmili institute for the MSc National Univeristy Entrance Exam of Indutrial Engineering:

Operation research (2010)

XII. RESEARCH PROJECT SUPERVISION

1. Doctoral Research Student:

− (Supervisor: 2017-now): Mohamad Arbabpor bidgoli (PhD Transport), email: m.arbabpour@ut.ac.ir.

− (Supervisor: 2016-now): Sayna Firoozi (PhD Transport), email: sayna.firoozi@ut.ac.ir

Research topic: *Examining women behavior in ridesharing using hybrid choice modelling: A Virtual reality experiment approach*

− (Supervisor: 2014-now): Aref Babazadeh (PhD Transport), email: aref.babazadeh@ut.ac.ir, Research topic: *Public transit resilience and network vulnerability in case of malicious attak*

− (Supervisor: 2013-now): Mostafa Bababeik (Graduated PhD), email:

bababeik@ut.ac.ir, Research area: *Emergency Train Location in Railway network with regard to Vulnerability Analysis*

− (Advisor: 2011-2017): Abdoul-Ahad Choupani (Graduated PhD), email:

ahadchoupani@shahroodut.ac.ir, Research area: *A Methodology to Integerize Iterative Proportional Fitting (IPF) Tables for Forecasting Urban Travel Demand*

2. Master Projects:

− (Supervisor): Golnoosh Sarkandi (MSc Transport, 2019-now), email: golnoosh.sarkandi@ut.ac.ir, MSc thesis topic: *Identifying the factors influencing women's attitudes in choosing shared taxis during the outbreak of the Coronavirus and the post- Corona period*

- (Supervisor): Sajjad Mazloom (MSc Transport, 2019-now), email: Sajjadmazloum76@ut.ac.ir, MSc thesis topic: *Investigating the behavior of pedestrians and cyclists by designing an urban virtual reality environment.*

- (Supervisor): Amin Naeini Labaf (MSc Transport, 2018-now), email: m.amin.naeini@ut.ac.ir, MSc thesis topic: *Behavioral analysis of shared-bike mode choice: Laboratory experiment of the stated preference (SP) survey in the virtual reality environment.*

- (Supervisor): Ahmad Jafari Ivari (MSc Transport, 2018-now), email: ahmad.jaafari@ut.ac.ir, MSc thesis topic: *Identifying attitudinal factors affecting the choice of shared-micro-mobility transportation: Laboratory experiment of the stated preference (SP) survey in the virtual reality environment.*

- (Supervisor): Ali Ekramifard (MSc Transport, 2018-now), email: aliekramifard@ut.ac.ir, MSc thesis topic: *Analysis of satisfaction of people with disabilities from public transportation services in Tehran.*

- (Supervisor): Amir Ghanbari (MSc Transport, 2018-2019), email: ghanbari.amir@ut.ac.ir, MSc thesis topic: *Structural equation modelling of pedestrians' intention to jaywalk.*

- (Supervisor): Hamed Malekzadeh (MSc Transport, 2018-2019), email: hamed.malekzadeh@ut.ac.ir, MSc thesis topic: *Overnight Travel Demand: A Discrete-Continuous Approach for Modelling Traveler's Decision Making Behavior.*

- (Supervisor): Hossein Karami (MSc Transport, 2017-2019), email: hkarami01@gmail.com, MSc thesis topic: *Rail transport network vulnerability analysis against sandstorms.*

- (Supervisor): Jamal Khosrow (MSc Transport, 2016-2019), email: jamal_khosro@alumni.ut.ac.ir, MSc thesis topic: *Optimal cost management of support systems in rail transport networks with a case study of emergency locomotive positioning in the rail transport network.*

- (Supervisor): Saber Moradi (MSc Transport, 2016-2018), email: ali.abaspour@alumni.ut.ac.ir, MSc thesis topic: *Estimating path travel time of passenger cars in the Tehran metropolitan area using location data received from bus probes.*

- (Supervisor): Mohamad Ghavidel (MSc Transport, 2016-2018), email: mohamad.ghavidel@alumni.ut.ac.ir, MSc thesis topic: *Estimating the time-dependent distribution of travel time of urban routes.*

- (Supervisor): Komeil Motaghian (MSc Transport, 2015-2017), email: Komeil.motaghian@gmail.com, MSc thesis topic: *Modeling and analysis of immigrants' long travel decisions*

- (Supervisor): Ali Abaspour (MSc Transport, 2015-2017), email: ali.abaspour@alumni.ut.ac.ir, MSc thesis topic: *Modeling Tourist's Decisions Using Discrete Choice Analysis.*

- (Supervisor): Mohammad Farjadamin (MSc Transport, 2015-2017), email: mfa1370@yahoo.com, MSc thesis topic: *Optimal scheduling of rail system maintenance programs with the possibility of train scheduling modification.*

- (Supervisor): Seyed Mohsem Mahmoudi (MSc Transport, 2015-2019), email: mfa1370@yahoo.com, MSc thesis topic: *Simulation of the movement of passengers sent from Tehran railway station.*

- (Supervisor): Hamed Khorami (MSc Transport, 2014-2016), email: hi9870@gmail.com, MSc thesis topic: *A departure time model development using discrete choice methods.*

- (Supervisor): Hamed Izadi (MSc Transport, 2014-2016), email: hamedizadi@ut.ac.ir, MSc thesis topic: *Pedestrians' intention to jaywalk: Utilizing moral norms as the latent variable of the discrete choice model.*

- (Adviser): Masoud Khanmohammadi (MSc Transport, 2014-2016), email: masoud.rail14@gmail.com, MSc thesis topic: *Security vulnerability of hazardous material rail transshipments.*

- (Supervisor): Airmasoud Almotahari (MSc Transport, 2014-2016), email: am.almotahari@ alumni.ut.ac.ir, MSc thesis topic: *Vulnerability analysis of transportation networks based on the route choice and departure time choice modelling of travelers.*

- (Supervisor): Rouzbeh Forouzandeh (MSc Geomatics Engineering, 2013-2015), email: roozbehforoozandeh@gmail.com, MSc thesis topic: Calculation of links travel times in GIS using probe vehicle data.

- (Supervisor): Ramin Saedi Germi (MSc Transport, 2013-2015), email: ramin_saedi@alumni.ut.ac.ir, MSc thesis topic: *Investigating the learning mechanism in the travelers' day-to-day dynamic behavior.*

- (Advisor): Sajjad Abbastabar (MSc Transport, 2013-2015), email: sajjadabbastabar@gmail.com, MSc thesis topic: *Fuzzy benefit/cost analysis of rail transit projects considering uncertainties in the construction schedule of the project: The case study of the Qom Metro System.*

XIII. PARTICIPATION IN TRAINING COURSES

- **Workshop on Decisions under Uncertainty: Theory and Applications**
  Date: January 15, 2016
  Place: University of Cergy-Pontoise, France
-
- **Advances in Discrete Choice Modelling**
  Date: December 18th, 2015,
  Place: University of Cergy-Pontoise, France

- **Multi-Objective Optimization Using Evolutionary Algorithms**
  Date: January 2013
  Place: Raypars consulting engineers, Tehran, Iran.
-
- **Meta-heuristic Methods in Hard Optimization**
  Date: October 2012
  Place: Raypars consulting engineers, Tehran, Iran.
-
- **UrbanSim Tutorial and User Meeting**

Date: May 17 - 20 2010
Place: ETH Zurich (Swiss Federal Institute of Technology Zurich) - Switzerland

–
– **METROPOLIS Tutorial and User Meeting**
Date: May 22 2010
Place: ETH Zurich (Swiss Federal Institute of Technology Zurich) - Switzerland

–
– **PTV-Vision VISUM/VISSIM Transportation and Traffic Modeling Software Tutorial**
Date: October 2007
Place: Tarh-e-Haftom Consulting Engineers, Tehran, Iran

XIV. LANGUAGE PROFICIENCY

Persian (mother language), English, French (colloquial rather than technical), Some Arabic

XV. COMPUTER SKILLS

MATLAB   VBA   C++ (some)   Python (some)
R   SPSS (Some)   SYSTAT (Some)
Visum   Vissim   HCS 2000   Hicap2000   METROPOLIS
AimSun (Some)   UrbanSim
Lindo
Microsoft office: Word, Excel, PowerPoint, OneNote, and Visio
Prezi   Endnote
Adobe Photoshop, Adobe Acrobat
AutoCAD   KENLAYER   KENSLAB   SB-SLOP   Sewer   LOOP
ETABS   SAFE
Expertchoice (AHP Decision Making Software)

XVI. HOBBIES/SPORTS

Drawing cartoons
Writing comic books

Swimming
Hiking/backpacking