

Curriculum Vitae

PERSONAL INFORMATION

Ben-Elia, Eran

ORCID: <http://orcid.org/0000-0002-4169-7129>

Web: <http://www.bgu.ac.il/~benelia>

• EDUCATION

- 2008 PhD
 Transportation and Geo-Information Engineering, Technion – Israel
 Institute of Technology, Israel
- 2000 M.Sc (Cum Laude)
 Urban and Regional Planning, Technion – Israel Institute of Technology, Israel

• CURRENT POSITIONS

- 2014 Senior Lecturer
 Geography and Environmental Development, Ben-Gurion University of the Negev, Israel
- 2014 GAMES Lab Head – (Game-based models)
 Geography and Environmental Development, Ben-Gurion University of the Negev, Israel
- 2014 Senior Research Fellow, Geography and Human Environment, Tel Aviv University

• PREVIOUS POSITIONS

- 2017 Visiting Lecturer, University of the Aegean, Greece.
- 2013 – 2014 Senior Research and Teaching Fellow
 Geography and Human Environment, Tel Aviv University
- 2010 – 2010 Senior Research Fellow
 Centre for Transport and Society, University of West of England, UK
- 2008 – 2010 Postdoc Researcher
 Human Geography and Planning, Utrecht University, Netherlands
- 2007 – 2008 Research Associate
 Transportation Research Institute, Technion – Israel Institute of Technology, Israel

• FELLOWSHIPS AND AWARDS

- 2014 NSF funded Travel Grant, University of Chicago, Illinois
- 2013 – 2014 **Returning Scientist Fellowship** – Israeli Ministry of Immigration and Absorption
- 2003 – 2007 Full Scholarship for Ph.D. studies. Technion – Israel Institute of Technology, Israel
- 2001 Prize for **best M.Sc Thesis**. Faculty of Architecture and Town Planning, Technion
 – Israel Institute of Technology, Israel
- 2000 **M.Sc Cum Laude**. Technion – Israel Institute of Technology.
- 1995 – 1997 Full Scholarship for M.Sc. studies, Technion – Israel Institute of Technology,
 Israel
- 1998 Prize for **excellence in M.Sc studies**, Faculty of Architecture and Town Planning,
 Technion – Israel Institute of Technology, Israel
- 1995 **B.A. Magna Cum Laude**, Economics and Political Science, Faculty of Social
 Sciences, Tel Aviv University, Israel
- 1993 **Dean's list of distinguished students**, Faculty of Social Sciences, Tel-Aviv
 University, Israel

• SUPERVISION OF GRADUATE STUDENTS AND POSTDOCTORAL FELLOWS

- 2018 – M.Sc. (Co-Advisor), S. *Kaufman*, Faculty of Eng. Geography and Environmental
 Development, Ben-Gurion University of the Negev, Israel
- 2018 – P.hD (Co-Advisor), S. *Ben-Zvi*, Faculty of Civil and Environmental Eng. Technion,
 Israel
- 2017 – M.A, D, *Bogin*, Geography and Environmental Development, Ben-Gurion
 University of the Negev, Israel
- 2017 – P.hD (Co-Advisor), R. *Bachar*, University of Milano-Bicocca, Italy
- 2017 – M.Sc (Co-Advisor), L. *Zivion*, Geography and Human Environment, Tel Aviv
 University
- 2017 – Ph.D. (Co-Advisor), N. *Fullman*, Geography and Human Environment, Tel Aviv

- University
- 2017 – PhD. (Co-Advisor), G. *Ben-Dor*, Geography and Human Environment, Tel Aviv University
- 2016 – Post Doc (Advisor), B. *Demtryeva*, Geography and Environmental Development, Ben-Gurion University of the Negev, Israel
- 2016 – MA (Advisor), O. *Avni*, Geography and Environmental Development, Ben-Gurion University of the Negev, Israel
- 2016 – MA (Advisor), G. *Haviv*, Geography and Environmental Development, Ben-Gurion University of the Negev, Israel
- 2015 – Post Doc (Advisor), N. *Levy*, Geography and Environmental Development, Ben-Gurion University of the Negev, Israel
- 2014 – Post Doc (Co-Advisor), A. *Shabalov*, Geography and Human Environment, Tel Aviv University
- 2014 – PhD student, I. *Klein*, Geography and Environmental Development, Ben-Gurion University of the Negev, Israel
- 2012 – PhD student, (Examiner) H. *Bowkett*, Faculty of Environment and Technology, University of West of England, UK
- 2010 – PhD student (Co-Advisor/Examiner), X. *Lu*, Faculty of Civil Engineering, U. of Massachusetts Amherst, USA
- 2010 – 2013 Master Students, S. *Milles*, A. *Miles*, Faculty of Environment and Technology, University of West of England, UK

• **TEACHING ACTIVITIES**

- 2018 Lecturer – Introduction to Economics for Geographers, Ben-Gurion University, Israel
- 2017 Lecturer – Planners Forum (MA), Ben-Gurion University, Israel
- 2017 Lecturer – Seminar in Transportation
- 2016 – 2018 Lecturer–Transportation Planning (MA), Ben-Gurion University, Israel
- 2015 – 2017 Lecturer – Transport Geography (BA), Ben-Gurion University, Israel
- 2014 – 2017 Lecturer – Virtual Geography (BA), Ben-Gurion University, Israel
- 2014 – 2017 Lecturer – Economic Geography (BA), Ben-Gurion University, Israel
- 2013 – 2014 Lecturer – Virtual Geography (BA), Tel Aviv University, Israel
- 2013 – 2014 Lecturer – SPSS 1+2 (BA), Tel Aviv University, Israel
- 2013 – 2014 Lecturer – Quantitative Research Methods in Geography (BA), Tel Aviv University, Israel
- 2012 – 2013 Lecturer – Transport Economics and Appraisal (M.Sc), University of West of England
- 2012 – 2013 Lecturer – Changing Travel Behaviour (M.Sc), University of West of England
- 2006 – 2007 Adjunct Lecturer – Transportation Planning Lab, Technion, Israel
- 2004 – 2007 Adjunct Lecturer – Transportation Planning, Technion, Israel
- 2003 – 2005 Adjunct Lecturer – Statistics for Engineers, Technion, Israel
- 2003 – 2007 Adjunct Lecturer – Traffic Engineering Lab, Technion, Israel
- 1997 – 1998 Adjunct Lecturer – Computer Methods in Planning, Technion, Israel

• **ORGANISATION OF SCIENTIFIC MEETINGS**

- 2017 European Association of Research in Transport (hEART) member of local organization committee.
- 2017 Workshop Co-organizer – Let's Play! Inferring Travel Choices with Games and Virtual Reality, 96th Annual Meeting of the Transportation Research Board of the National Academies, USA
- 2016 Symposium Chair – Emerging and Shared Transportation Modes and Mobility Services, Tel Aviv University, Tel Aviv, Israel
- 2016 Workshop organizer – International Workshop on ICT, Activities, Time Use and Travel” – Nanjing University, Nanjing, China.
- 2016 Session Track Organizer / ICTs, Activities, Time Use and Travel Behaviour – 14th World Conference on Transportation Research, Shanghai
- 2015 Workshop Co-organizer / Advanced Travel Information Systems – 94th Annual Meeting of

- 2014 the Transportation Research Board of the National Academies, USA
Session Co-organizer / Big Data, ICTs, and Travel Demand Models – 93rd Annual Meeting of the Transportation Research Board of the National Academies, USA
- 2013 Session Track Organizer / ICTs, Activities and Travel – 13th World Conference on Transportation Research, Portugal
- 2013 Workshop Co-organizer / Impact of Information on Behaviors of Travelers –92nd Annual Meeting of the Transportation Research Board of the National Academies, USA

• **INSTITUTIONAL RESPONSIBILITIES**

- 2017 - Member of departmental student recruitment committee
- 2014 – 2016 Head of Departmental Excellent Students Program, Geography and Environmental Development, Ben-Gurion University of the Negev, Israel
- 2014 – Faculty member, Humanities and Social Sciences, Ben-Gurion University, Israel
- 2012 – 2013 Module Leader (Transport Economics), University of the West of England, UK
- 2012 – PhD Examiner, University of the West of England, UK

• **REVIEWING AND EDITORIALS**

Journals: Transportation Research Part A / B / C / F, Transportation , Transportation Science, Transport Policy , Transport Reviews, Journal of Transport Geography , Transportmetrica A, Mobilities, European Journal of Transportation Infrastructure Research, Journal of Choice Modeling, Journal of Operations and Production Management, Journal of Evaluation and Program Planning, International Journal of Environmental Research and Public Health, Environment and Behavior, Natural Resources Forum (United Nations Department of Economic and Social Affairs)

Scientific Foundations: National Science Foundation - Decision, Risk, and Management Sciences; Chilean Science Foundation (CONICYT); Dutch Science Foundation (NWO) - Cooperation with China in Operations Research. COST (EU)

Editorials: EDB Member: Transportation Research Part C (2017 -), Transportation (2016 -) Transportation Letters (2016 -); Special Issue of Transportation, ICT, activity-space and travel Guest Editor, Special Issue of Transport Policy, Selected Papers on Travel Behavior of the 12th WCTR (2013)

• **MEMBERSHIPS OF SCIENTIFIC SOCIETIES**

- 2014 – European Network for Communication and Transport Research (NECTAR) Cluster 8 – Information and Communication Technologies
- 2010 – Committee on Effects of ICT on Travel Choice, Transportation Research Board of the National Academies (US)
- 2009 – International Association of Travel Behaviour Research
- 2009 – Chair of Special Interest Group – ICT, Activities, Time Use and Travel Behaviour (SIG-D4) World Conference on Transportation Research Society (WCTRS).

• **RESEARCH GRANTS**

<i>Project Title</i>	<i>Funding source</i>	<i>Amount</i>	<i>Period</i>
Smart Adaptive Public Transport	ERA-NET	€106K	2014-2016
Cooperation in Congested Road Networks	ISF	€90K	2014-2017
Adaptive Dynamic Parking Pricing: From Theory to Practical Implementation	Institute of Transportation Innovation, Tel Aviv University	€65K	2015-2018
From Big Data to Public Transport Demand by fusing cellular and smartcard data	Chief Scientist Office, Israel Ministry of Transport	€65K	2016-2019
Adoption of the shared autonomous vehicle: A Game-based model of urban travelers and transportation	Chief Scientist Office, Israel Ministry of Transport	€110K	2017-2020

Development of an open source decision making application for public transport reliability estimation	Survey of Israel	€14K	2018-2020
---	------------------	------	-----------

- **PUBLICATIONS**

Refereed articles and refereed letters in scientific journals

- Ben-Elia E.**, Shiftan Y, Shefer D., (2003), Transportation Impact Statement (TIS): A new tool for transportation and land use planning, *Environment & Planning A*, 35, 12, 2177-2190.
- Ben-Elia E.**, Erev I., Shiftan. Y., (2008), The combined effect of information and experience on drivers' route-choice behavior, *Transportation*, 35, 165-177.
- Ben-Elia E.**, Ettema D., (2009), Carrots versus sticks: Rewarding commuters for avoiding the rush-hour - a study of willingness to participate, *Transport Policy*, 16, 68-76.
- Ben-Elia E.**, (2009), Pricing in road transport (Book Review), *J.of Transport Geography*, 17, 318-319
- Ben-Elia E.**, Shiftan Y., (2010) Which road do I take? A learning-based model of route choice with real-time information, *Transportation Research A*, 44, 249-264.
- Ben-Elia E.**, Ettema D. (2011), Changing commuter behavior using rewards for avoiding rush-hour driving, *Transportation Research F*, 14, 354-368.
- Ben-Elia E.**, Ettema D. (2011), Rewarding rush-hour avoidance: A study of commuters' travel behavior, *Transportation Research A*, 45, 567-582.
- Lu X., Gao S., **Ben-Elia E.** (2011), Information Impacts on Route Choice and Learning Behavior in a Congested Network: Experimental Approach, *Transportation Research Record*, 2243, 89-98.
- Tillema T., **Ben-Elia E.**, Ettema D., Van Delden, J., (2013), Charging versus rewarding: A comparison of road-pricing and rewarding peak avoidance in The Netherlands, *Transport Policy*, 26, 4-14.
- Ben-Elia E.**, Ishaq R., Shiftan Y. (2013), If only I had taken the other road: Regret, risk and reinforced learning in informed route choice?, *Transportation*, 40, 269-293.
- Ben-Elia E.**, Di-Pace R., Bifulco G. N., Shiftan Y. (2013), The impacts of information's accuracy on route-choice, *Transportation Research C*, 46, 146-159.
- Ben-Elia E.**, Shiftan Y., (2013) Understanding behavioural change: An international perspective on sustainable travel behaviours and their motivations": Selected Papers from the 12th World Conference on Transportation Research (Editorial), *Transport Policy*, 26, 1-3
- Clayton W., **Ben-Elia E.**, Ricci, M., Parkhurst G.,(2014), Where to park?: A behavioural comparison of bus Park and Ride and city centre car park usage in Bath, UK., *J. of Transport Geography*, 36, 124-133.
- Ben-Elia E.**, Alexander B., Hubers C., Ettema D., (2014) Activity fragmentation, ICT and travel: An exploratory path analysis of spatiotemporal interrelationships, *Transportation Research A* , 68, 56-74.
- Lu X., Gao S., **Ben-Elia E.**, (2014) Pothering R., Information Impacts on Travelers' Route Choice Behavior in a Congested Risky Network, *Mathematical Population Studies*, 21, 205-219.
- Ben-Elia E.**, Avineri I., (2015) Response to travel information: A behavioural review, *Transport Reviews*, 35, 352-377.
- Ben-Elia E.** Benenson, I., Rofe Y., Safra E., Geyzersky, D. (2015), A Spatially-Explicit Big Data application for computation and evaluation of public transport accessibility in Tel Aviv-Yafo, Tichnun, 12, 37-58. (In Hebrew)
- Kumar V. S, Bhat C. R., Subodh K. D., Pendyala R., Daehyun Y., **Ben-Elia E.**, Ettema D., The Impacts of an Incentive-Based Intervention on Peak Period Traffic: Experience from the Netherlands, *Transportation Research Record*, in press. DOI: 10.3141/2543-20
- Levy N., **Ben-Elia E.**, (2016), Emergence of system optimum: A fair and altruistic agent-based route-choice model, *Procedia Computer Science*, 83, 928-93317.
- Klein I., **Ben-Elia E.**, (2016), Emergence of cooperation in congested road networks using ICT and future and emerging technologies: A game-based review, *Transportation Research Part C: Emerging* 72, 10-28
- Benenson, I. **Ben-Elia E.**, Rofe Y., Geyzersky, D. (2017), The benefits of a high-resolution analysis of transit accessibility, *International Journal of GIS*, 31, 213-236.

Dong H., **Ben-Elia E.**, Cirillo C., Toledo T, Prashker J. N. (2017), On Negative Correlation: A Comparison between Multinomial Probit and GEV-based Discrete Choice Models, *Transportmetrica A*,13, 365-379.

Stathopoulos A., Cirillo C., **Ben-Elia E.**, Cherchi E., Schmoecker J. D., Li J., Innovation adoption modeling in transportation: new models and data (workshop report), *Journal of Choice Modelling*, 25, 61-68.

Klein I, Levy N., **Ben-Elia E.** (2017), An Agent-Based Model of a System-Optimal ATIS, *Procedia Computer Science*, 109, 893-898.

Tang Y., Gao S., **Ben-Elia E.**, (2017) An Exploratory Study of Instance-Based Learning for Route Choice with Random Travel Times, *J. of Choice Modelling*, 24, 22-35.

Klein, I., **Ben-Elia, E.** (2017). System optimal ATIS as a congestion management instrument—Game-based experiment and agent based model. In *Models and Technologies for Intelligent Transportation Systems (MT-ITS), 2017 5th IEEE International Conference on Intelligent Transportation Systems*, 816-820

Harouvi O., **Ben-Elia E.**, De Hoogh K., Factor R., Kloog I., Noise estimation model development using high-resolution land use regression, *Journal Of Exposure Science And Environmental Epidemiology*, (in press)

Ben-Dor G., **Ben-Elia E.**, Benenson I., Assessing the Impacts of Dedicated Bus Lanes on Urban Traffic Congestion and Modal Split with an Agent-Based Model, *Procedia Computer Science*, 130, 824-829.

Levy N., Klein I., **Ben-Elia E.**, Emergence of cooperation and a fair system optimum in road networks: A game-theoretic and agent-based modelling approach, *Research in Transport Economics* (in press)

Levy N., **Ben-Elia E.**, An exploratory study of spatial patterns of cycling in Tel Aviv using passively generated bike-sharing data, *J. of Transport Geography* (in press)

Klein I., Levy N. **Ben-Elia E.** (2018), An agent-based model of the emergence of cooperation and a fair and stable system optimum using ATIS on a simple road network, *Transportation Research Part C*, 86, 183-201.

(b) Refereed chapters in books

Avineri E, **Ben-Elia E.**, (2015), Prospect Theory and its application to the modelling of travel choice. Bounded Rational Choice Behavior; S. Rasouli, H. Timmermans eds. ; ISBN: 978-1-78441-072-8

Ben-Elia E., Avineri E., (2015), Opportunities and Threats of Travel Information: A Behavioural Perspective, Thomopoulos N., Givoni M, Rietveld P. eds. *ICT for transport: Opportunities and threats – NECTAR series on Transportation and Communications Research*, Edward Elgar, ISBN: 9781-78347-128-7

Benenson I., **Ben-Elia E.** Rofe Y., Rosental A. (2016), Estimation of Urban Transport Accessibility at the Spatial Resolution of an Individual Traveler, Thakuria P., Tilahun N., Zellner M. (eds.), *Seeing Cities Through Big Data - Research, Methods and Applications in Urban Informatics*, Springer. ISBN 978-3-319-40902-3

(c) Monographs

Ben-Elia E. (2011), *Route-Choice with Real Time Information: Behavior, Learning and Modeling*, Lambert Academic Press, Saarbrücken. ISBN 978-3-8443-1255-3.

• LECTURES AND PRESENTATIONS AT MEETINGS AND INVITED SEMINARS

(a) Presentations at international conferences/meetings

European Transport Conference (2007, 2009, 2010)

World Conference on Transportation Research (2007, 2010, 2016)

International Association for Travel Behaviour Research, (2009, 2012, 2015)

International Choice Modelling Conference (2009)

Triennial Symposium on Transportation Analysis, (2010, 2016)

Annual meeting of the Transportation Research Board (2008, 2010, 2011, 2012, 2013, 2015, 2016, 2017)

Association of Israeli Geographers (2013, 2014, 2015, 2016)

Universities Transport Studies Group (2014)

NSF-funded Conference on Big Data and Urban Informatics (2014)

Network of communication and transport research (NECTAR) (2015)

European Regional Science Association (ERSA), NECTAR-ERSA Special Session on “New Data and Methods in Accessibility Analysis (2015)

ABM Trans workshop (2016, 2017, 2018)

European Association of Research in Transportation (hEART) - 2017

(b) Invited presentations at international seminars and workshops

Discrete Choice Modeling Workshop, EPFL, Switzerland (2009-2011)

Time Use Observatory Workshop, Santiago, Chile (2009)

Transportation Statistics Users Group (2011), London, UK

Impacts and Benefits of Smart Mobility (2012), Veolia Transport TransDev, Paris, France (Invited Expert)

Travel Behavior Dynamics Workshop (2013), University of Maryland, USA

Wild Cards for Future of European Transport Industries (2013), Tel Aviv University (Invited Expert).

COST Action – Transportation Equity Analysis (2013), Technion, Israel

ICT and Physical Mobility (2014), Imperial College London, UK (Invited Expert)

Advanced Traveler Information Systems, 94th annual meeting of the Transportation Research Board, Washington DC, USA (2015).

Ben-Gurion University, Decision Making and Economic Psychology Center Retreat (2015), Sde Boker, Israel.

Technology and Geography Workshop (2015), Ben-Gurion University of the Negev, Israel.

Innovation adoption modeling in transportation: innovative models and data (2015), Windsor, UK

Frontiers in Transportations (2015) – An update on social networks and travel, Windsor, UK

Workshop on Adaptive Transportation Systems, European Association of Research in Transport (hEART), Copenhagen, Denmark

Workshop on Smart Urban Mobility (2015), Napier University, Edinburgh, UK

NECTAR CL 8 workshop: Big data: a new opportunity for urban transport and mobility policies (2016). Sevilla, Spain

International Conference of the Association of China Planning, Peking University, Beijing

ICT, Activities, Time Use and Travel” – International Workshop, Nanjing University, Nanjing, China (2016).

International Symposium on Emerging and Shared Transportation Modes and Mobility Services, , Tel Aviv, Israel.

Lets Play! Inferring Travel Choices with Games and Virtual Reality, 96th annual meeting of the Transportation Research Board, Washington DC, USA.

Game-Based Modeling of Human-Driven Geographic Systems, Geocomputation, Leeds, (2017)

Mining Israeli smartcard data: A typology of public transport travel patterns, International Conference on Transport Survey Methods, Montreal (2017)

(c) Seminar presentations at universities and institutions

Technion - Israel Institute of Technology; Faculty of Civil and Environmental Engineering (2005, 2007, 2009)

Tel-Aviv University, Department of Psychology, Tel Aviv, Israel (2006)

ETH - Swiss Federal Institute of Technology, Zurich; Institute of Transport Planning and Systems (IVT), Zurich, Switzerland (2008).

University of Leeds Institute of Transport Studies, Leeds, UK (2008).

EPFL - Swiss Federal Institute of Technology, Lausanne, Transport and Operations Research Lab, Lausanne, Switzerland. (2008)

Utrecht University, Faculty of Geosciences, Department of Human Geography and Planning (2009)

Tel Aviv University, Department of Geography and Human Environment, Tel Aviv, Israel (2009, 2013)

University of the West of England, Department of Planning and Architecture, Centre for Transport and

Society (2010)

University College London, Bartlett School of Planning, London, UK (2011)

Cardiff University, School of City and Regional Planning, Cardiff, Wales, UK (2012)

Hebrew University Jerusalem, Department of Geography, Jerusalem, Israel (2013)

Ben-Gurion University, Department of Geography and Environmental Development, Beer-Sheba, Israel (2013)

Tel Aviv University, Department of Geography and Human Environment, Tel Aviv, Israel (2015).

University of Glasgow, Urban Big Data Centre, Glasgow, UK (2015).

Humboldt University Graduate School (BIGS2), Berlin, Germany (2017)

Department of Shipping, Transport and Trade, University of the Aegean, Chios, Greece (2017)