

# Amanda Stathopoulos

## William Patterson Junior Assistant Professor

Dep. Civil & Environmental Engineering  
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Nationality: Swedish

Year born: 1982

## Education

- Jan. 2009-Dec. 2011 **Ph.D Transportation Economics**, Trieste University at DEAMS (*Department of Economics, Business, Mathematics and Statistics "Bruno de Finetti"*), Trieste, Italy, PhD Thesis: Modeling heterogeneous decision processes and joint decision-making in travel demand models (Viva completed April 2012.), Supervisors Prof. Danielis and Prof. Marcucci.
- Oct. 2006-Jul. 2008 **M.Sc Development Economics**, Two-year MSc in Economic and Social sciences for Cooperation and Development, Sapienza University, Rome, Italy. Awarded with full marks (110/110 con lode) average mark of 29.6/30, Thesis: Interactive or unitary Households? A choice experiment on housing decision-making. Subject course: Econometrics, supervised by Prof. Carlucci.
- Sep. 2003-Nov. 2006 **BA Development Economics**, Political and economic sciences for cooperation and development, University of Roma Tre, Rome, Italy, Acceptability of urban road pricing strategies: The Stockholm trial. Subject course: Development Economics, supervised by Prof. Marcucci
- Sep. 2002-Feb. 2003 **Social work studies**, 30 ECTS, Lund University, Sweden.
- 2002 **High School Diploma**, Applied arts, Bolandsskolans gymnasium, Uppsala, Sweden.

## Professional Positions

- Sep. 2014- current **William Patterson Junior Professor Assistant Professor**, Department of Civil and Environmental Engineering, McCormick School of Engineering and Applied Science, Northwestern University, Evanston, IL, USA.
- Jan. 2012-Aug. 2014 **Research Fellow - Post-Doc**, Transportation and Mobility Laboratory, School of Architecture, Civil and Environmental Engineering, École Polytechnique Fédérale de Lausanne (EPFL), Switzerland.
- Aug. 2011 **Visiting Scholar**, Institute for Transport Studies (ITS), Leeds University, UK.  
Host: Prof. Stephane Hess
- Jan. 2011-Jun. 2011 **Tutor**, University of Padova and Centro 'Giorgio Lago', Rome, Italy, Advanced course on 'Policies for regional development'. Co-Co-Co employment organizing course for Invitalia SpA. (Italian Government national agency for investments for regional development).
- Feb. 2010-Apr. 2010 **Visiting Scholar**, Institute for Transport Studies (ITS), Leeds University, UK.  
Host: Prof. Stephane Hess
- Jan. 2009-Mar. 2009 **Collaborator**, Department of 'Istituzioni Pubbliche Economia e Società (DIPES) at Roma Tre University and I-Com, Italian institute for competitiveness.  
Research comparing the impact of powered two-wheelers and passenger cars for accessibility, security and pollution, considering different European institutional settings.
- Jul. 2007-Aug. 2007 **Internship**, World Food Programme, Transition and Emergency, H.Q., Rome - Paid internship of six weeks. Elaboration of case-studies on post-emergency financing and the role of WFP - value added by operations in post-emergency transitions through logistic assistance and food-aid.
- Jan. 2005-Feb. 2005 **Consultant**, NERA Economic Consulting, Rome. Research and Italian-Swedish translation work within research project on privatization and regulation of tendering contracts in the European railway industry.

## Research Interests

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- Contribution of mobility innovation to urban resilience and quality of life via mixed methods research using qualitative and quantitative approaches
- Modelling transformative mobility services (automation, sharing, on-demand), focusing on model advancement to assess impact on transportation systems and diverse user groups
- Travel behaviour, acceptance and adoption processes towards new mobility options and technological innovation
- Modelling (non-utility maximising) decision processes and accounting for attitudes to improve understanding of (realistic) respondent behaviour
- Freight behaviour modeling and behavior in crowd-shipping systems; interaction among stakeholders and modelling diffusion and performance of freight innovations

## Publications

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Summary peer-reviewed publications: Journals: 30; Books: 1; Book Chapters: 3, Editor of special issues: 5; submitted: 2  
 ✱ Northwestern PhD, ◇ MS, ‡ post-doc

### Citations

- Citations in Google Scholar: 942, h-index: 13, i10-index: 18
- Scopus, h-index: 12

### Book

- B1** Marcucci, E., Gatta, E., Valeri, E. Stathopoulos, A. (2013) Urban Freight Transport Modelling: An Agent-specific Approach, Franco Angeli Editor, Milan, Italy

### Book Chapters

- BC3** Valeri, E., Stathopoulos, A., Marcucci, E., Gatta, (2015) Travelers' Perceptions of Security for Long Distance Travel: An Exploratory Italian Study (eds Hakim, S., Albert, G., Shiftan, Y), in Securing Transportation Systems, Wiley & Sons, Hoboken NJ
- BC2** Stathopoulos, A., Valeri, E., Marcucci, E., Gatta, V., Nuzzolo, A., Comi, A., (2011) Urban freight policy innovation for Rome's LTZ: A stakeholder perspective, in: 'City distribution and urban freight transport: multiple perspectives' (eds Macharis, C., and Melo, S.), Edward Elgar Publishing, Cheltenham UK
- BC1** Marcucci, E., Valeri, E., Stathopoulos, A., Gatta, (2011) Local public transport, service quality and tendering contracts (eds Venezia, E.), in: Urban Sustainable Mobility, Franco Angeli, Milano

### Papers in preparation

- Soria, J\*, Chen, Y., Stathopoulos, A. (2019) "Competing on-demand mobility services: Spatial and Sociodemographic investigation of Taxi and Ridesourcing services in Chicago, Illinois", *in preparation*
- Punel, A\*, Stathopoulos, A. Horvat, A. (2019) "Modeling Driver Behavior in Crowd-shipping", *Submitted to The international conference series on Advances in Social Network Analysis and Mining (ASONAM )*
- Weiss, A., Punel, A\*, Soria, J\*, Ben-Elia, E., Shiftan, Y., Stathopoulos, A (2019) "Understanding the Impact of New Service Features on Ridesharing Uptake in Emerging Markets: A Case Study of Israel." *Submitted to hEART: European Association for Research in Transportation*
- Harb, M. Stathopoulos, A; Shiftan, Y. Walker, J. (2019) "What Do We (Not) Know About Our Future with Automated Vehicles? A Literature Review of Travel-Related Behavior Implications" *in preparation*
- Punel, A\*. Said, M\*. Chen, Y., Stathopoulos, A (2019) "Matching on Peer-to-peer Shipping Platform Performance via Communication Analysis" *in preparation*

### Papers in Journals - submitted/under review

- Sub2** Biehl, A\*, Said, M\*, Stathopoulos, A. (2019) "What do joint error correlations reveal about parallel decision-making processes? An application to active mobility adoption", *submitted*
- Sub1** Soria, J\*, Chen, Y., Stathopoulos, A. (2019) "Ridesourcing Behavior Profiles: Application of K-Prototype Analysis on Large-scale Data from Chicago, Illinois" *under review*

### Papers in Journals - recently accepted

- J30** Borowski, E\*, Stathopoulos, A. (2019) "On-Demand Rideshare for Emergency Relocation: An Exploratory Analysis of Context and Emotionality" **International International Journal of Disaster Risk Reduction** accepted Nov 26th 2019

- J29 Ermagun, A†., Punel, A\*, Stathopoulos, A. (2020) "Shipment Status Prediction in Online Crowd-Sourced Shipping Platforms" **Sustainable Cities and Society** accepted Nov 11 2019

### Papers in Journals - published

- J28 Ermagun, A†., Shamshiripour, A., Stathopoulos, A. (2019) "Performance Analysis of Crowd-Shipping in Urban and Suburban Areas" **Transportation** Publ. online July 18, <https://doi.org/10.1007/s11116-019-10033-7>
- J27 Le, T, Stathopoulos, A. Van Woensel, T. Ukkusuri, S.V (2019) "Supply, Demand, Operations, and Management of Crowd-shipping Services: A Review and Empirical Evidence" **Transportation Research Part C: Emerging Technologies** Volume 103, pp 83-103
- J26 Sha, Z., Bi, Y., Wang, M., Stathopoulos, Contractor, N., Fu, Y. and Chen, W. (2019) "Comparing Utility-Based and Network-Based Approaches in Modeling Customer Preferences for Engineering Design" **Proceedings of the Design Society: 22nd International Conference on Engineering Design (ICED19)** Vol. 1, No. 1, pp. 3831-3840, Cambridge University Press.
- J25 Mete, F\*, Chen, Y., Stathopoulos, A. Corr, D. (2019) "A comparative study of predictive analysis methods to estimate Bridge response" **Transportation Research record** <https://doi.org/10.1177/0361198119843866>
- J24 Biehl, A\*, Ermagun, A†., Stathopoulos, A. (2019) "Utilizing stage-based behavioral theory to model the process of bikeshare adoption" **Transportation Policy** Vol. 77, pp 30-45
- J23 Punel, A\*, Ermagun, A†., Stathopoulos, A. (2019) "Push and Pull Factors in Adopting a Crowdsourced Delivery System" **Transportation Research record** Vol. 2673 issue 7, pp 529-540
- J22 Biehl, A\*, Chen, Y., Sanabria-Veaz, K., Uttal, D., Stathopoulos, A. (2019) "Where does active travel fit within local community narratives of mobility space and place?" **Transportation Research Part A: Policy and Practice** Vol. 123, pp 269-287
- J21 Biehl, A\*, Ermagun, A†., Stathopoulos, A. (2018) 'Community mobility MAUP-ing: A Socio-Spatial Investigation of Bikeshare Demand in Chicago' **Journal of Transport Geography** vol 66. pp 80-90
- J20 Biehl, A\*, Ermagun, A†., Stathopoulos, A. (2018) 'Modelling determinants of walking and cycling adoption: A stage-of-change perspective' **Transportation Research Part F: Traffic Psychology and Behaviour** vol. 58, pp 452-470
- J19 Ermagun, A†., Stathopoulos, A. (2018) 'To Bid or Not To Bid: The Supply Determinants of Crowd-Shipping' **Transportation Research Part A: Policy and Practice**, Vol. 116, pp 468-483
- J18 Punel, A\*, Ermagun, A†., Stathopoulos, A. (2018) 'Studying Determinants of Crowd-shipping Use' **Travel Behaviour and Society** Vol. 12, pp. 30-40
- J17 Stathopoulos, A., Sener, I, 2017. 'Transforming mobility systems with sharing and automation' **Transportation**, Vol. 44(6), pp 1255-1259 <http://rdcu.be/vKi8>
- J16 Punel, A\*, Stathopoulos, A. (2017) 'Modeling the acceptability of crowdsourced goods deliveries: role of context and experience effects', **Transportation Research Part E: Logistics and reviews** vol 105, pp. 18-38
- J15 Varotto, S., Glerum, A., Stathopoulos, A., Bierlaire, M., Longo, G. (2017) 'Mitigating the impact of errors in travel time reporting on mode choice modelling' **Journal of Transport Geography** vol 62, pp. 236-246
- J14 Stathopoulos, A., Cirillo, C., Cherchi, E., Ben-Elia, E., Li, Y-T., Schmocker, J-D. (2017) "Innovation adoption modeling in transportation: new models and data", **Journal of Choice Modelling**, vol. 65, pp 61-68
- J13 He, M., Lu, H., Stathopoulos, A., Nie, M. (2017) "Characterization of Trip-level Pace Variability based on Taxi GPS Trajectory Data", **Transportation Research Record**, No. 2667, DOI 10.3141/2667-06
- J12 Miller, J\*, Nie, M., Stathopoulos, A. (2017) "Crowdsourced Urban Package Delivery: modelling traveler Willingness to Work as Crowdshippers", **Transportation Research Record** No. 2610, DOI 10.3141/2610-08
- J11 Hess, S., Stathopoulos, A. 2014. A mixed random utility - random regret model linking the choice of decision rule to latent character traits **Journal of Choice Modelling**, Vol. 9, pp 27-38
- J10 Stathopoulos, A., Marcucci, E., 2014. De Gustibus Disputandum Est: Non-Linearity in Public Transportation Service Quality Evaluation. **International Journal of Sustainable Transportation**, Vol. 8(3), pp 47-68
- J9 Hess, S., Stathopoulos, A., 2013. Linking response quality to survey engagement: a combined random scale and latent variable approach. **Journal of Choice Modelling**, Vol. 7, pp 1-12
- J8 Hess, S., Stathopoulos, A., Campbell, D., O'Neill, V., Caussade, S., 2013. It's not that I don't care, I just don't care very much: confounding between attribute non-attendance and taste heterogeneity. **Transportation**, Vol. 40(3), pp 583-607
- J7 Stathopoulos, A., Hess, S., 2012. Revisiting reference point formation, gains-losses asymmetry and non-linear sensitivities with an emphasis on attribute specific treatment. **Transportation Research Part A: Policy and Practice**, Vol. 46(10), pp 1673-1689
- J6 Hess, S., Stathopoulos, A., Daly, A., 2012. Allowing for heterogeneous decision rules in discrete choice models: an approach and four case studies. **Transportation**, Vol. 39(3), pp 565-59

- J5** Stathopoulos, A., Valeri, E., Marcucci, E., 2012. Stakeholder reactions to urban freight policy innovation. **Journal of Transport Geography**, Vol. 34(1), pp 15-38
- J4** Marcucci, E., Stathopoulos, A., Danielis, R., Rotaris, L., 2012. Comparing single and joint preferences: A choice experiment on residential location in three-member households. **Environment and Planning, Part A**, Vol. 43(5), pp 1209 - 1225
- J3** Marcucci, E., Stathopoulos, A., 2012. Multi-level governance and transport policy: the case of local roads in Italy. **International Journal of Transport Economics**, Vol. 34(1), pp 15-38
- J2** Valeri, E., Stathopoulos, A., Marcucci, E., 2012. Energy efficiency in the transport sector, policy evolutions and evaluation in some european countries. **Economics and Policy of Energy and the Environment**, Vol. 2(2), pp 1-36
- J1** Marcucci, E., Stathopoulos, A., Gatta, V., Valeri, E., 2012. A stated ranking experiment to study policy acceptance: the case of freight operators in Rome's LTZ. **Regional Science/Scienze Regionali**, Vol. 3, pp 11-30

### Editor of Special Issues

- E5** Stathopoulos, A., with Nie, M, Ban, J. 2018. Editor of special issue "Transportation System Analysis for Better Policy-Making" **Transportation**
- E4** Stathopoulos, A., with Sener, I, 2017. Editor of special issue "Transforming mobility systems with sharing and automation" **Transportation**, Vol. 44(6), pp 1255-1259 <http://rdcu.be/vKi8>
- E3** Stathopoulos, A., with Lin, J., Nie, M, 2017. Editor of special issue "Emerging Urban Mobility Services: Characterization, Modeling and Application" **Transportation Research Part C: Emerging Technologies**, Vol. 44(6), pp 1255-1259 <http://rdcu.be/vKi8>
- E2** Stathopoulos, A., with Marcucci, E., 2013. Editor of special issue "Measuring Service Quality and Local Public Transport Performance" **International Journal of Sustainable Transportation**, Vol. 8(3), pp 1-4
- E1** Marcucci, E., Stathopoulos, A., 2012. Editor of special issue "Quality, Regulation and Environmental Sustainability in Public Transport". **International Journal of Transport Economics**, Vol. 34(1), pp 15-38

### Online working papers

- WP3** Hess, S., Stathopoulos, A., 2011, Linking response quality to survey engagement: a combined random scale and latent variable approach, Institute for Transport Studies, ITS Working Paper, University of Leeds, →download
- WP2** Stathopoulos, A., Hess, S., 2011, Referencing, Gains-Losses Asymmetry And Non- Linear Sensitivities In Commuter Decisions: One Size Does Not Fit All!, CREI Working Papers 0511, Università degli Studi Roma Tre, →download
- WP1** Marcucci, E., Stathopoulos, A., Danielis, R., Rotaris, L., 2010, Residential choices and interaction in three-member households: a choice experiment, University of Urbino 'Carlo Bo' working Paper series, Department of Economics, No 1012, →download

### Conference proceedings

- C20** Biehl, A\*, Ermagun, A.‡, Stathopoulos, A. Towards a framework for identifying success parameters for equitable bike sharing, Association of American Geographers (annual meeting), Philadelphia, 2017
- C19** Miller, J\*, Nie, M. Stathopoulos, A. Poster: Crowdsourced Urban Package Delivery: modelling traveler Willingness to Work as Crowdshippers, TRB, Washington, 2017
- C18** Punel, A\*. Stathopoulos, A. Poster: Exploratory Analysis of Crowdsourced Delivery Service Through a Stated Preference Experiment, TRB, Washington, 2017
- C17** Biehl, A\*. Chen, Y, Uttal, D. Stathopoulos, A. Poster: Exploring Active Transport Needs in a Chicago Neighborhood Using Focus Groups, TRB, Washington, 2017
- C16** Varotto, S. Glerum, A. Stathopoulos, A., and Bierlaire, M. Modelling travel time perception in transport mode choices, Proc. Swiss Transport Research Conference, Monte Verità, Switzerland, 2014
- C15** Hanseler, F. Molyneaux, N. Stathopoulos, A., and Bierlaire, M. Schedule-based estimation of pedestrian demand within a railway station, Proc. Swiss Transport Research Conference, Monte Verità, Switzerland, 2014
- C14** Stathopoulos, A., Glerum, A., Thémans, M., and Bierlaire, M. Dynamic vehicle ownership forecasting, Proc. Swiss Transport Research Conference, Monte Verità, Switzerland, Apr. 24-26, 2013
- C13** Stathopoulos, A., Glerum, A., Thémans, M., and Bierlaire, M. Dynamic vehicle ownership forecasting, Proc. European Symposium on Quantitative Methods in Transportation Systems, Lausanne, Switzerland, Sep. 4-7, 2012
- C12** Stathopoulos, A., Marcucci, E., Heterogeneity in Urban Freight Policy Analysis: The Case of Own-Account Retailers and Transport Providers in Rome's LTZ, Proc. International Conference on Travel Behavior Research, Toronto, US, Jul. 15-20, 2012
- C11** Hess, S. Stathopoulos, A., Linking the decision process to underlying constructs in a latent variable latent class approach: first round, Proc. International Conference on Travel Behavior Research, University of Toronto, US, Jul. 15-20, 2012

- C10** Hess, S. Stathopoulos, A., Daly, A., Allowing for heterogeneous decision rules in discrete choice models: an approach and four case studies, International Choice Modeling Conference, Jul. 4-6, Oulton, UK, 2011
- C9** Hess, S., Stathopoulos, A., Linking response quality to survey engagement: a combined random scale and latent variable approach, International Choice Modeling Conference, Jul. 4-6, Oulton, UK, 2011
- C8** Stathopoulos, A., Hess, S., Modeling multi-attribute reference-dependence in choice experiments: Does one size fit all?, Proc. TRB ( Traveler Behavior and Values Committee (ADB10)), Washington DC, US, Jan. 23-27, 2011
- C7** Stathopoulos, A., Valeri, E., Marcucci, E. Stakeholder acceptability of freight policy innovation: Lessons from Rome's Limited Traffic Zone, Proc. TRB ( reviewed by Planning Paper Review Subcommittee (AT025(1))), Washington DC, US, Jan. 23-27, 2011
- C6** Hess, S., Stathopoulos, A., Daly, A., Mixing of behavioral processes: a modeling framework and four case studies, Proc. TRB (reviewed by Transportation Demand Forecasting Committee (ADB40)), Washington DC, US, Jan. 23-27, 2011
- C5** Hess, S., Stathopoulos, A., Linking response quality to survey engagement: a combined random scale and latent variable approach. Proc. European Transport Conference, Glasgow, UK, Oct. 11-13, 2010
- C4** Stathopoulos, A., Hess, S. Modeling multi-attribute reference-dependence in choice experiments: Does one size fit all?. Proc. WCTR, Lisbon, Portugal, Jul. 11-15, 2010
- C3** Marcucci. E., Stathopoulos, A Danielis. R., Rotaris. L. Residential location preferences and relative power in three-member households: a choice experiment. Proc International Conference of the International Association for Travel Behaviour Research (IATBR), Jaipur, India, Dec. 13-18 2009
- C2** Marcucci. E., Stathopoulos, A., Danielis. R., Rotaris. L.: Environmental quality and accessibility trade-offs in household residential location choices: A choice experiment to measure member interaction and relative power. Proc. Kuhmo-Nectar IV International Conference on Pricing, Financing, Regulating Transport Infrastructures and Services, Urbino, Italy, Jul. 9-11, 2007
- C1** Stathopoulos, A.: Acceptance of road pricing between personal experience and political bias: The Stockholm trial. Proc. Kuhmo-Nectar IV International Conference on Pricing, Financing, Regulating Transport Infrastructures and Services, Urbino, Italy, Jul. 9-11, 2007

#### **Papers in Journals: Italian**

- IJ1** Stathopoulos, A., Marcucci, E., 2012. Scelta residenziale delle famiglie: ruolo dell'interazione fra membri e impatto territoriale. **EyesReg - online journal of the Italian Association of Regional Science**, Vol. 1(1), online

#### **Book Chapters: Italian**

- IBC7** Stathopoulos, A., Valeri, E., Marcucci, E., Gatta, V., 2011. La mobilità urbana delle merci: in 'Linee guida dei piani di logistica urbana sostenibile (ed. Delle Site, Filippi, Nuzzolo), Maggioli Editore, Santarcangelo, ISBN 8838782015
- IBC6** Stathopoulos, A., Valeri, E., Marcucci, E., Gatta, V., 2011. Analisi delle preferenze per politiche di logistica urbana nella ZTL di Roma, in: in 'Sostenibilità, Qualità e Sicurezza nei Sistemi di Trasporto e Logistica (ed. Marcucci, E.), Franco Angeli, Milano, ISBN 978-88-568-3742-1
- IBC5** Stathopoulos, A., 2010. Household residential preferences: a choice experiment to compare joint and separate decisions, in: 'Competitività del sistema e ricadute sul territorio', (eds Borruso, G., Danielis, R., Musso, E.) Franco Angeli, Milano, ISBN 978-88-568-2528-2
- IBC4** Stathopoulos, A., 2010. Uso di mezzi a due ruote e politiche di sviluppo sostenibile, in: Sviluppo sostenibile, tutela dell'ambiente e della salute umana, Morlacchi Editore, Perugia. ISBN 978-88-6074-339-8
- IBC3** Valeri, E., Stathopoulos, A., Marcucci, E., Gatta, V., Rotaris, L., 2010. Ottimizzazione della logistica distributiva nella ZTL a Roma: ruolo degli attori e processo decisionale, in: Sviluppo sostenibile, tutela dell'ambiente e della salute umana, Morlacchi Editore, Perugia. ISBN 978-88-6074-339-8
- IBC2** Stathopoulos, A., 2008. Congestion policy and public acceptability in practice: Lessons from Stockholm on the role of choice, in: Economia dei trasporti e logistica economica: Ricerca per l'innovazione e politiche di governance, (Ed Forte, E.), Giordano Editore, Milano.
- IBC1** Stathopoulos, A., 2008. La politica di tariffazione marginale delle strade: preoccupazione ambientale o problema di accessibilità?, in: Sviluppo sostenibile, Tutela dell'Ambiente e della Salute Umana, Morlacchi Editore, Perugia.

## Presentations at Scientific Meetings and Workshops

#### **Invited talks**

- 'Modeling Innovative Mobility Services: Future of Passenger and Freight Movement' Presentation at The 4th NYUAD Transportation Symposium, Arab Emirates, University of New York Abu Dhabi, Nov. 2018 (organisers: Samer Madanat, Ali Diabat, Monica Menendez, Saif Jabari)

- 'Nearly neoclassical – choice analysis in practice balancing prediction and description' Presentation in workshop in honour of McFadden, University of California at Santa Barbara, July 2018 (organisers: Stephane Hess, Joan Walker, Moshe Ben-Akiva)
- Presentation in workshop 'Envisioning Future Cities' From science fiction to smart, sustainable, and resilient urban systems, New York, National Science Foundation's Research Coordination Grant on Sustainable Cities, Aug 2017 (Sybil Derrible, John Taylor)

### Presentations

- P29** Modelling travel time perception in transport mode choices, TRB 94th Annual Meeting, Jan 11-15, 2015, Washington DC & Poster Session: 785 'Travel Demand Models R Us'
- P27-28** Linking decision processing to indicators of real world perceptions in a latent variable latent class approach 2<sup>nd</sup> & Dynamic vehicle ownership forecasting, hEART Symposium, KTH, Stockholm, Sweden, September 4-6, 2013
- P26** Dynamic vehicle ownership forecasting: a framework to model inter-temporal renewal decisions, 13<sup>th</sup> Discrete Choice Workshop, EPFL, Lausanne, Switzerland, May 30-31, 2013
- P25** Dynamic vehicle ownership forecasting: a framework to model inter-temporal renewal decisions, Swiss Transport Research Conference, Monte Verità, Switzerland, Apr. 24-26, 2013
- P24** Car demand in the future: enriching forecasting models with market dynamics, behavioural variables and policy evolution. Research and innovation for transport systems of the future, Paristech, Ministère Recherche et Enseignement Supérieur, Paris, France, Nov. 14, 2012
- P23** Dynamic vehicle ownership forecasting, 1st European Symposium on Quantitative Methods in Transportation Systems, Lausanne, Switzerland, Sep. 4-7, 2012
- P22** Linking the decision process to underlying constructs in a latent variable latent class approach: first round & Heterogeneity in Urban Freight Policy Analysis: The Case of Own-Account Retailers and Transport Providers in Rome's LTZ 13th International Conference on Travel Behavior Research, Toronto, US, Jul. 16-17, 2012
- P21** Modelling alternative fuel vehicle purchases: a discrete choice experiment, Nectar Cluster-2 Workshop on Urban and Regional Transport: Regulation, Sustainability, E-Mobility, Dresden, Germany, Feb. 10-11, 2012
- P18-20** Revisiting reference point formation, gains-losses asymmetry and non-linear sensitivities: one size does not fit all! & Modelling heterogeneous decision rules in discrete choice models & It's not that I don't care, I just don't care very much: confounding between attribute non-attendance and taste heterogeneity Glasgow, UK, European Transport Conference, Oct. 10-12, 2011
- P17** Veicoli a carburanti alternativi: prospettive di mercato ed un analisi sperimentale, Annual conference Italian society for industrial economists, Trieste, Italy, Sep. 23, 2011
- P16** Modelling heterogeneous decision rules in discrete choice models, 1st Workshop on Modelling behaviour: recent advances and future directions', ITS Leeds, UK, Sep. 8, 2011
- P15** Modelling heterogeneous decision rules in discrete choice models, 7th Workshop on discrete choice models, EPFL Lausanne Switzerland, Aug. 25-27, 2011
- P14** Allowing for heterogeneous decision rules in discrete choice models: an approach and four case studies, 2nd International Choice Modelling Conference, Oulton, UK, Jul. 4-6 2011
- P13** Factors influencing alternative fuel vehicle purchase: a discrete choice experiment, SIET XIII annual conference, Messina, Italy, Jun. 16-17, 2011
- P12** Jointly Accounting for Departures from Compensatory Decision-Protocols and Joint Decision-Making (Doctoral student research seminar: P11-1936), Transportation Research Board 90th annual meeting, Washington DC, US, Jan. 23-27, 2011
- P11** De gustibus est disputandum: Preference heterogeneity in a SP experiment on transit service quality, Nectar Cluster-2 meeting, Rome, Italy, Oct. 22-23, 2010
- P10** Linking response quality to survey engagement: a combined random scale and latent variable approach, European Transport Conference, Glasgow, UK, Oct. 11-13, 2010
- P8-9** Modelling multi-attribute reference dependence in a commuting experiment: does one size fit all? & Acceptability of freight policy innovation from a stakeholder perspective: Rome's LTZ, 12<sup>th</sup> World Conference on Transport Research, Lisbon, Portugal, Jul. 11-15, 2010
- P6-7** Modelling multi-attribute reference dependence in a commuting choice experiment: Does one size fit all? & Urban freight policy innovation for Rome's LTZ: a stakeholder perspective, SIET XII annual conference, Rome, Italy, Jun. 17-18, 2010
- P5** Urban Freight transport innovation for Rome's LTZ - decision making in a complex policy scenario, Nectar Cluster-3 meeting, Porto, Portugal, Nov. 22 2009
- P4** Urban Freight transport innovation for Rome's LTZ, CREI workshop, Rome, Italy, Nov. 4, 2009

- P3** La politica di tariffazione marginale delle strade, CIRIAF 8<sup>th</sup> annual meeting, Perugia, Italy, Apr. 4-5, 2008
- P2** Congestion policy and public acceptability in practice: Lessons from Stockholm on the role of choice, SIET IX annual conference, Napoli, Italy, Oct. 3-5 2007
- P1** Acceptance of road pricing between personal experience and political bias: The Stockholm trial, Kuhmo Nectar Conference and Summer School, Urbino, Italy, Jul. 9-11, 2007

## Research Grants and Participation in Research Projects

<b>NSF-Career</b> Mar. 2019–2024.	<b>Transformative mobility analysis: Mixed Methods framework</b> , USD 500'000, PI, Duration: 60 m, Funded by US National Science Foundation, Civil, Mechanical and Manufacturing Innovation (CMMI) #1534138.
<b>DOT</b> Dec. 2018–Sep 2019	<b>Models and policy tools for emerging transportation services: Promoting socially inclusive outcomes</b> , USD 5'000, PI (Grant for J. Soria), Duration: 12m, Funded by US Department of Transportation Federal Highway Administration # 693JJ31945046.
<b>NSF-BIC</b> Sept. 2015–2018, extension 2019.	<b>Smart CROWdsourced Urban Delivery (CROUD) System</b> , USD 1'000'000, co-PI (PI M. Nie), Duration: 36 m, Funded by US National Science Foundation: Partnership For Innovation - Building Innovation capacity #1534138.
<b>NU-Finite Earth</b> Sept-Mar. 2019	<b>NU Finite Earth Initiative Data Science Award</b> , USD 35'000, Duration: 6 m, PI (co-PI' Wei Chen), Awarded for project 'Shaping energy futures: understanding adoption of clean technology using novel data sources'.
<b>NU-NICO</b> May-Sept. 2017	<b>NU Institute for Complex Systems (NICO) Data Science Initiative award</b> , USD 35'000, Duration: 6 m, PI (co-PI's Agnes Horvat, Ying Chen), Awarded for project 'Is ours better than mine: Investigating collaborative consumption systems'.
<b>NU-Alumnae</b> Aug-Sept. 2017	<b>Alumnae of Northwestern University Award for Curriculum Development</b> , USD 12'500, Duration: 2 m, sole PI, awarded to develop new undergraduate CEE course "Engineering Possibilities: Decision Science in the Age of Smart Technologies", link to Alumnae award.
<b>NISSAN</b> Mar. 2014–Sept 2014.	<b>ELECTRIC VEHICLE ADOPTION DYNAMICS: EXPLORING MARKET POTENTIALS</b> , CHF 450'000, Project Manager (PI M. Bierlaire, Collaborator A. Fernández Antolín), Duration: 36 m, Funded by Nissan International.
<b>SNSF</b> Sep. 2013–2016.	<b>CAPTURING LATENT CONCEPTS WITH NON INVASIVE SENSING SYSTEMS</b> , CHF 180'150, Project Manager (PI M. Bierlaire, Collaborator E. Kazagli), Duration: 2013–2016, Funded by the Swiss National Science Foundation, Grant #200021_146621.
<b>Constellium</b> Jul. 2012-Dec. 2012	<b>Project Manager</b> , Scientific service contract for Constellium / Innovation Cells (located in EPFL's Innovation Square), École Polytechnique Fédérale de Lausanne (EPFL), Switzerland. Main outcome: developed a choice experiment adapted to evaluate market viability and pricing strategy of a novel aerospace product applied in a real decision context, grant awarded CHF 35'000
<b>PSA Peugeot Citroën</b> Apr. 2012-Mar. 2013	<b>A DYNAMIC VEHICLE CHOICE FORECASTING FRAMEWORK</b> , CHF 98'400, Project Manager (PI M. Bierlaire, Collaborator A. Glerum), Duration: 12 m, Aim: develop a novel methodology for forecasting car ownership transition behaviour and model attitude profiles, PSA Peugeot Citroën.
<b>PRIN</b> Mar. 2010-Sep. 2012	<b>METHODS AND MODELS FOR EFFICIENT ESTIMATION OF URBAN FREIGHT DISTRIBUTION STRATEGIES</b> , EURO 36'869, Project Collaborator (PI F. Filippi), Duration: 24 m. Funded by Italian PRIN (Research Program of Relevant National Interest), Grant #2008-YEPPM3-005
<b>VRef</b> Jan. 2009-Dec. 2010	<b>INNOVATIVE SOLUTIONS TO FREIGHT DISTRIBUTION IN THE COMPLEX LARGE URBAN AREA OF ROME</b> , Project Collaborator (PI F. Filippi), Duration: 48 m, Task: Coordinator and organizer of focus-group meetings with stakeholders and CAPI interviews with urban freight operators in Rome's Limited Traffic Zone, Funded by Volvo Research Foundation, Grant #SP-2007-50.

## Awards/Appointments & Memberships

### Appointments

- Appointment to the National Academies Transportation Research Board (TRB) committee on Transportation Demand Forecasting ADB40 (6-year term starting 2015)
- Appointment as chair of a sub-committee on 'Emerging Methods and Developments in Urban Activity and Travel Analysis' ADB40(1) (3-year term starting 2015, renewed 2018)
- William Patterson Junior professorship Chair, 2015-2021, Northwestern University, Department of Civil and Environmental engineering
- Searle Teaching Program Fellow, Northwestern University (2016)
- Qualified to access Associate Professor positions through Italian National Scientific Habilitation (obtained 2014, valid 4 y.)

- Honorary Fellow (Cultore della Materia) in Applied Economics and Development Economics, Italy, since 2010
- Ph.D scholarship from Trieste University 'M.I.U.R. - Progetto Giovani Ricercatori' from Italian Ministry of Education, Universities and Research, 2009-2011

### Awards

- Award for Best Research on Innovation paper by TRB Urban Freight Transportation Committee 2018 for "Performance Analysis of Crowd-shipping in Urban and Suburban Areas"
- Northwestern Alumnae Award for Curriculum Development 2017

### Academic Memberships

- Faculty affiliate of Northwestern Spatial Intelligence and Learning Center [SILC], since 2018
- Faculty affiliate of Northwestern Transportation Center [NUTC], since 2015
- Affiliate of University of Leeds Choice Modelling Centre (CMC), since 2015
- Member of Centre for Research on the Economics of Institutions (CREI), Roma Tre University, since 2009
- Member of Italian Society of Transport Economists (SIET), since 2008

## Editorial Activity

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### Guest-editor of the Special Issues

- Transportation System Analysis for Better Policy-Making, Transportation, ongoing (with J. Ban and Y. Nie)
- Transforming mobility with sharing, connectivity and automation, Transportation, (with Ipek Sener)
- Emerging Urban Mobility Services: Characterization, Modeling and Application, Transportation Research Part C, (with M. Nie, J. Lin))
- Measuring Service Quality and Local Public Transport Performance, International Journal of Sustainable Transportation, scheduled as Vol. 8(1), 2014, (with E. Marcucci), published online
- Quality, regulation and environmental sustainability in public transport investment, International Journal of Transport Economics, Vol. 34(1), 2013 (with E. Marcucci)

## Teaching Experience

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- Winter Q. 2019 **Instructor**, 210 'Engineering Possibilities, decision science in the age of smart technologies' [1 credit], Northwestern, USA, Designed, taught, examined full quarter, 10w lectures, 38 students.
- Winter Q. 2019 **Instructor**, 480-1 'Travel Demand Analysis & Forecasting' [1 credit], Northwestern, USA, Designed, taught, examined full quarter, 10w lectures, 17 students.
- Spring Q. 2018 **Instructor**, 473 'Survey methods, data and analysis ' [1 credit], Northwestern, USA, Designed, taught, examined full quarter, 10w lectures, 6 students.
- Fall Q. 2017 **Individual lectures**, 2 lectures in 479-0 'Transportation Systems Planning and Management' (Schofer) & 1 lecture in 195-0 'Introduction to Civil and Environmental Engineering (Corr) ', Northwestern, USA.
- Spring Q. 2017 **Instructor**, 473 'Survey methods, data and analysis ' [1 credit], Northwestern, USA, Designed, taught, examined full quarter, 10w lectures, 6 students.
- Winter Q. 2017 **Instructor**, 480-1 'Travel Demand Analysis & Forecasting 1' [1 credit], Northwestern, USA, Designed, taught, examined full quarter, 10w lectures, 17 students.
- Fall Q. 2016 **Individual lectures**, 2 lectures in 479-0 'Transportation Systems Planning and Management' (Schofer) & 1 lecture in 195-0 'Introduction to Civil and Environmental Engineering (Corr) ' & 1 lecture in GE 195-1: Engineering Dialog I (Leonard), Northwestern, USA.
- Spring Q. 2016 **Instructor**, 473 'Survey methods, data and analysis ' [1 credit], Northwestern, USA, Designed, taught, examined full quarter, 10w lectures, 12 students.
- Winter Q. 2016 **Instructor**, 480-1 'Travel Demand Analysis & Forecasting 1' [1 credit], Northwestern, USA, Designed, taught, examined full quarter, 10w lectures, 13 students.
- Fall Q. 2015 **Individual lectures**, 4 lectures in 479-0 'Transportation Systems Planning and Management' (Schofer) & 1 lecture in 195-0 'Introduction to Civil and Environmental Engineering (Corr) ' & 1 lecture in 'Responsible Conduct of Research' (RCR) Training, Northwestern, USA.
- Fall Q. 2015 **Co-instructor**, Data as art - Interdisciplinary course taught with the School of Art Institute of Chicago, SAIC, weekly 3h [1 credit], Northwestern-SAIC, USA, 22 students.



- Spring Q. 2015 **Main instructor**, 480-2 'Travel Demand Analysis II: data and survey methods' [1 credit], Northwestern, USA, Designed, taught, examined full quarter, 10w lectures, 12 students.
- Winter Q. 2015 **Main instructor**, 480-1 'Travel Demand Analysis & Forecasting 1' [1 credit], Northwestern, USA, Designed, taught, examined full quarter, 10w lectures, 17 students.
- Fall Q. 2014 **Individual lectures**, 3 lectures in 479-0 'Transportation Systems Planning and Management' (Schofer), Northwestern, USA.
- Spring 2014 **Lecturer**, *Decision-aid methodologies in transportation* [4ects], EPFL, Switzerland, Tasks: Coordination and Teaching 6 lectures, Student examination.  
<http://transp-or.epfl.ch/courses/decisionAid2014/index.php>
- Autumn 2013 **Lecturer**, *Mathematical modeling of behavior* [4ects], EPFL, Switzerland, Tasks: Coordination and Teaching 5 lectures.  
<http://transp-or.epfl.ch/courses/dca2013/index.php>
- Autumn 2012 **Lecturer**, *Mathematical modeling of behavior* [4ects], EPFL, Switzerland.  
 Tasks: Coordinate and teach laboratory sessions in applied discrete choice models, 12 lectures
- Feb. 2012 **University lecturer**, *Methodological lesson for doctoral school in 'Political science, governance and institutions'*, Roma Tre University, Italy.
- Spring 2010 **University lecturer**, *Research and interview methodologies for applied research* [3ects] ECTS, Roma Tre University, Italy.  
 Course design and 50% of teaching, with E. Valeri

## Academic Service

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### PhD Students - sole advisor, NU

- o Aymeric Punel, 'Evaluating the Performance of a Crowdsourced Delivery System: Sender Behavior, Agent interaction and Network variables', Ph.D completed spring 2019
- o Alec Biehl, 'Investigating Theories of Individuals and Communities for Thresholds-of-Change Analysis in the Context of Active Travel Adoption', Ph.D completed spring 2019
- o Elisa Borowski, working title: 'Resilient community assessment: behavioral, network and communication analysis of relocation and disaster preparation', Ph.D expected in 2022
- o Jason Soria, working title: 'Mobility transitions with sharing, hailing and micro-transit: Policy guidance and community impacts', Ph.D expected in 2022
- o Maher Nizar Said, working title: 'Shaping low carbon energy futures: understanding adoption of clean technology using novel methods and data sources', Ph.D expected in 2022

### PhD Student Committee Member, NU

- o Lama Bou Mjahed, 'Cohort Effects and Technology Engagement in Connected User's Sustainable Activity and Travel Behavior', Ph.D expected in 2017, Supervisor: Mahmassani
- o Fiorella Mete, 'Statistical methods for the long-term monitoring of bridge performance', Ph.D expected in 2017/2018: Supervisor: Durango-Cohen/Corr
- o John Miller, 'Smart Crowd-sourced Freight: Integrating System Optimum and User Equilibrium for the Time-Dependent Probabilistic Profitable Tour Problem', Ph.D expected in 2017: Supervisor: Nie

### Student Supervision – Northwestern MA paper/theses

- o Manan Shah, NU Civil Engineering, MS Thesis 'Factors Impacting Use of Bikes and Bike-Sharing.', Fall Q. 2017
- o Mu-Huan Miles Chung, NU Civil Engineering, MS Thesis 'Stated Adoption of Autonomous Vehicles: A study of influential factors.', Fall Q. 2017
- o Yi Gu, NU Civil Engineering, MS Thesis 'Pedestrian Risky Crossing Behavior: An Application of the Theory of Planned Behavior.', Fall Q. 2017
- o Wenyang Gu, NU Civil Engineering, MS paper 'Attitudinal market segmentation for transit riders', Winter Q. 2017
- o Veronica Saeger, NU Mechanical Engineering, MS Thesis 'Understanding Customer Preference to Product Features in Engineering Design', Spring Q. 2016
- o Erik Jensen, NU Civil Engineering, MS paper 'Application of Edie's Definitions to Bicycle Traffic Flow', Spring Q. 2016
- o Hong Liang, NU Civil Engineering, MS paper 'US Transit Ridership Trends?', Spring Q. 2016
- o Tanus Nipastpong, NU Civil Engineering, MS paper 'Financial and Economic Analysis of High-Speed Rail', Spring Q. 2016
- o Siyi Liu, NU Civil Engineering, MS paper 'Positive Train Control on Metra?', Spring Q. 2016
- o Susheel Kumar Siram, NU Civil Engineering, MS paper 'Should we electrify our buses?', Winter Q. 2015
- o Ariane Bernard de Saint Affrique, NU Civil Engineering, MS paper 'Synthesis of Experience - BRT's implementation and success in developing countries', Spring Q. 2015
- o Kayla Spitzer, NU Civil Engineering, MS paper 'The Expansion of Heathrow Airport', Spring Q. 2015

### Capstone examiner for Northwestern Master of Project Management (MPM)

- Yaheng Wang, report 'A Risk Assessment Study of Railway Construction in China', Fall Q. 2016
- Ehron Nygard, report 'Fighting the Unsustainable Growth Curve: Urban Sprawl in Minneapolis, MN, and Methods for Trend Reversal', Spring Q. 2016
- Chun Jin, report 'Transforming an Underground Business Street into a Public Parking Lot in Harbin, China', 2015
- Mengyang Zhang, report 2015 'The Application of Transit-Oriented Development in Mainland China', 2015

### Student Supervision – Master/Bachelor theses (EPFL)

- Billal Mahoubi, EPFL Civil Engineering, 'Exploring approaches to model financial decisions', Autumn term 2013
- Silvia Francesca Varotto, EPFL Civil Engineering 'Modelling travel time perception in transport mode choice for a university campus' with & University of Trieste, MA thesis (delivered dec. 2013), Autumn term 2013, Co-sup. with A. Glerum
- Nicholas Alan Molyneaux, EPFL Mathematics, 'Movement patterns of pedestrians on platforms', BA thesis, Spring term 2013, Co-sup. with F. Hanseler

### Student Supervision – Semester Projects (EPFL)

- Quentin Mazars-Simon, System and Com., 'Schedule-based estimation of pedestrian travel demand within a quasi-uncongested railway station', Autumn term 2013, Co-sup. with F. Hanseler
- Billal Mahoubi, Civil Engineering, 'Modelling the demand for financial products', Autumn term 2013
- Natalie Sauerwald, Mathematics, 'Modelling car ownership duration', Spring term 2013, Co-sup. with A. Glerum
- Lea Kissling, Mathematics, 'Enhancement of Naville's Press Delivery Regulation Tool: An Exploratory Analysis', Spring term 2013, Co-sup. with E. Kazagli
- Areg Gevorgyan, Manag. Technology, 'Modelling the choice of vehicle in an extended framework', Autumn term 2012

### Academic seminar coordination and planning

- Organizer of the Northwestern Transportation Center academic seminar series (2015-ongoing) [Link to webpage](#)

### Evaluator of Graduate student grants

- NUTC dissertation year fellowship committee (2016)
- External examiner for David Boyce Graduate Awards Competition at UIC (2016, 2017)

### Reviewer for Journals (n=46)

- Transportation (7)
- Transportation Research Part E: Logistics and Transportation Review (6)
- Journal of Choice Modeling (4)
- Transportation Research Part B: Methodological (3)
- Transportation Research Part A: Policy and Practice (3)
- Transport Policy (3)
- Journal of Transport Geography (3)
- European Transport (3)
- Transportation Science (2)
- International Journal of Sustainable Transportation (2)
- Transportmetrica A (2)
- Transportation Research Part C: Emerging Technologies (1)
- Networks and Spatial Economics (1)
- Transportation Research Part D: Transport and Environment (1)
- International Journal of Transport Economics (1)
- Research in Transportation Business & Management (1)
- European Journal of Transport and Infrastructure Research (1)
- Urban Studies Research (1)
- Italian Journal of Regional Economics (1)

### Reviewer for the Conferences

- Transportation Research Board annual conference (TRB) – Review Coordinator 2015-2019
- International Choice Modelling Conference (ICMC)
- Symposium of the European Association of Research in Transport (hEART)
- International Symposium on Transportation and Traffic Theory (ISTTT)

### Evaluator of Research Grant Proposals

- National Science Foundation, Panel reviewer for Civil Infrastructure Systems, (CIS-Engineering), USA
- National Science Foundation, Ad-Hoc evaluator for Decision, Risk, and Management Sciences (DRMS), USA

### Grant preparation

- PI/CO-PI of proposals for the American Science Foundation (NSF, NSF:BIC, DRMS, CRISP), Department of Energy (ARPA-e), Department of Transportation, FHWA, NCFRP
- Co-author of EU 7th Framework Programme, EU COST proposal, & Swiss National Science Foundation (SNSF)
- Co-author of proposals for various calls of the Italian Ministry of Education, Universities and Research: "Research projects of significant national interest" (PRIN) and "Basic research investment fund" (FIRB)
- Author of several industrial partner collaboration proposals

## Scientific Conferences

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### Organizer of the scientific conferences

- Annual meeting of the Italian Society of Transport Economists, Rome, Italy, Jun. 17-18, 2010 (140 participants, organizing committee).
- Nectar Cluster 2 meeting on 'Quality, regulation and environmental sustainability in public transport', Rome, Italy, Oct. 22-25, 2010 (15 participants, local organizing committee).

### Member of the International Program Committee for the conferences

- 1st European Symposium on Quantitative Methods in Transportation Systems (LATSIS), Lausanne, Switzerland, Sep. 4-8, 2012.

### Chair in the conferences

- Transportation Research Board (TRB), Presiding officer of lectern sessions in 2017, 2016, e.g. session 265 'Modeling the Demand for New Mobility Concepts and Services'
- International Choice Modelling Conference (ICMC), Chaired Session: I-C(3), Oulton, UK, Jul. 4, 2011.
- World Conference on Transport Research (WCTR), Chaired Session: D3.15 Travel Behaviour, Lisbon, Portugal, Jul. 15, 2010.

## Languages

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- Swedish, Fluent (mother tongue)
- English, Fluent
- Italian, Fluent
- French, Intermediate: A2/B1
- Greek, Elementary

December 4, 2019