Curriculum Vitae

Updated 17 March 2022

Basic Information

Name: Erik Anders Jenelius
Date of Birth: 23 June 1980

Webpage: http://people.kth.se/~jenelius

Workplace Address:
Division of Transport Planning
Department of Civil and Architectural Engineering
KTH Royal Institute of Technology
Brinellvägen 23, SE-100 44 Stockholm, Sweden.
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Current Employment

Associate Professor of Public Transport Systems, Head of Division
Division of Transport Planning, Department of Civil and Architectural Engineering, KTH Royal Institute of Technology.
Start date: 1 May 2018 (Associate Professor), 16 October 2019 (Head of Division)

Previous Employments

2015-2018: Assistant Professor at the Division of Traffic and Logistics, Department of Transport Science / Division of Transport Planning Economics and Engineering, Department of Civil and Architectural Engineering, KTH Royal Institute of Technology.

2011-2015: Researcher (Swedish employment title: forskare) at the Division of Traffic and Logistics / Division of Transport Planning, Economics and Engineering, Department of Transport Science, KTH Royal Institute of Technology.

2006–2010: Ph.D. Candidate at the Division of Transport and Location Analysis, KTH Royal Institute of Technology.

2005–2006: Project Assistant at the Division of Transport Planning, Traffic Administration Office, City of Stockholm. I was involved in the evaluation of the Stockholm congestion trial.

2004–2005: Research Engineer at the Division of Transport and Location Analysis, KTH Royal Institute of Technology.

Education Qualification and Evaluations

Docent in Transport Science, KTH Royal Institute of Technology, November 2017.

Doctor of Philosophy (Ph.D.) in Infrastructure specialized in Transport and Location Analysis, KTH Royal Institute of Technology, 2011.

Licentiate of Engineering (Lic.Eng.) in Infrastructure specialized in Transport and Location Analysis, KTH Royal Institute of Technology, 2007.

Scientific Qualifications

List of International Peer-reviewed Journal Publications

1. Chen, H., Hatzenbühler, J. and Jenelius, E. (2022) Pick-up and delivery problem for sequentially consolidated urban transportation with mixed and multi-purpose vehicle fleet. *Journal of Advanced Transportation* 2022, article id 2920532, 18 pages.
2. Jenelius, E. (2022) Traveller recurrence and inter- versus intratraveller speed variability: Analysis with Bluetooth data. *Journal of Advanced Transportation* 2022, article id 6650310, 10 pages.
3. Almlöf, E., Rubensson, I., Cebecauer, M. and Jenelius, E. (2021) Who continued travelling by public transport during COVID-19? Socioeconomic factors explaining travel behaviour in Stockholm 2020 based on smart card data. *European Transport Research Review* 13, 31.
4. Badia, H. and Jenelius, E. (2021) Design and operation of feeder systems in the era of automated and electric buses. *Transportation Research Part A* 152, 146-172.
5. Cebecauer, M., Burghout, W., Jenelius, E., Babicheva, T. and Leffler, D. (2021) Integrating demand responsive services into public transport disruption management. *IEEE Open Journal of Intelligent Transportation Systems* 2, 24-36.
6. Hatzenbühler, J., Cats, O. and Jenelius, E. (2021) Network design for line-based autonomous bus services. *Transportation*, early access.
7. Kholodov, Y., Jenelius, E., Cats, O., van Oort, N., Mouter, N., Cebecauer, M. and Vermeulen, A. (2021) Public transport fare elasticities from smartcard data: Evidence from a natural experiment. *Transport Policy* 105, 35-43.
8. Laskaris, G., Cats, O., Jenelius, E., Rinaldi, M. and Viti, F. (2021) A holding control strategy for diverging bus lines. *Transportation Research Part C* 126, 103087.
9. Leffler, D., Burghout, W., Jenelius, E. and Cats, O. (2021) Simulation of fixed versus on-demand station-based feeder operations. *Transportation Research Part C* 132, 103401.
10. Martins Leite de Almeida, C., Silveira, S., Jenelius, E. and Fuso-Nerini, F. (2021) Using the Sustainable Development Goals to evaluate possible transport policies for the city of Curitiba. *Sustainability* 13(21), 12222.
11. Peftitsi, S., Jenelius, E. and Cats, O. (2021) Evaluating crowding in individual train cars using a dynamic transit assignment model. *Transportmetrica B: Transport Dynamics* 9(1), 693-711.
12. Hatzenbühler, J., Cats, O. and Jenelius, E. (2020) Transitioning towards the deployment of line-based autonomous buses: Consequences for service frequency and vehicle capacity. *Transportation Research Part A* 138, 491-507.
13. Jenelius, E. (2020) Personalized predictive public transport crowding information with automated data sources. *Transportation Research Part C* 117, 102647.
14. Jenelius, E. (2020) Data-driven metro train crowding prediction based on real-time load data. *IEEE Transactions on Intelligent Transportation Systems* 21(6), 2254-2265.
15. Jenelius, E. and Cebecauer, M. (2020) Impacts of COVID-19 on public transport ridership in Sweden: Analysis of ticket validations, sales and passenger counts. *Transportation Research Interdisciplinary Perspectives* 8, 100242.
16. Peftitsi, S., Jenelius, E. and Cats, O. (2020) Determinants of passengers' metro car choice revealed through automated data sources: A Stockholm metro case study. *Transportmetrica A: Transport Science* 16(3), 529-549.
17. Saadallah, A., Moreira-Matias, L., Sousa, R., Khiari, J., Jenelius, E. and Gama, J. (2020) BRIGHT - Drift-aware demand predictions for taxi networks. *IEEE Transactions on Knowledge and Data Engineering* 32(2), 234-245.

18. Ding-Mastera, J., Gao, S., Jenelius, E., Rahmani, M. and Ben-Akiva, M. (2019) A latent-class adaptive routing choice model in stochastic time-dependent networks. *Transportation Research Part B: Methodological* 124, 1-17.
19. Laskaris, G., Cats, O., Jenelius, E., Rinaldi, M. and Viti, F. (2019) Multiline holding based control for lines merging to a shared transit corridor. *Transportmetrica B: Transport Dynamics* 7(1), 1062-1095.
20. Tympakianaki, A., Koutsopoulos, H. N. and Jenelius, E. (2019) Anatomy of tunnel congestion: Causes and implications for tunnel traffic management. *Tunnelling and Underground Space Technology* 83, 498-508.
21. Zhang, W., Jenelius, E. and Badia, H. (2019) Efficiency of semi-autonomous and fully autonomous bus services in trunk-and-branches networks. *Journal of Advanced Transportation* 2019, art. id. 7648735, 17 pages.
22. Cats, O. and Jenelius, E. (2018) Beyond a complete failure: The impact of partial capacity degradation on public transport network vulnerability. *Transportmetrica B: Transport Dynamics* 6(2), 77-96.
23. Cebecauer, M., Jenelius, E. and Burghout, W. (2018) Integrated framework for real-time urban network travel time prediction on sparse probe data. *IET Intelligent Transport Systems* 12(1), 66-74.
24. Fu, J. and Jenelius, E. (2018) Transport efficiency of off-peak urban goods deliveries: A Stockholm pilot study. *Case Studies on Transport Policy* 6(1), 156-166.
25. Jenelius, E. (2018) Public transport experienced service reliability: Integrating travel time and travel conditions. *Transportation Research Part A: Policy and Practice* 117, 275-291.
26. Jenelius, E. and Koutsopoulos, H. N. (2018) Urban network travel time prediction based on a probabilistic principal component analysis model of probe data. *IEEE Transactions on Intelligent Transportation Systems* 19(2), 436-445.
27. Tympakianaki, A., Koutsopoulos, H. N., Jenelius, E. and Cebecauer, M. (2018) Impact analysis of transport network disruptions using multimodal data: A case study for tunnel closures in Stockholm. *Case Studies on Transport Policy* 6(2), 179-189.
28. Fu, J., Jenelius, E. and Koutsopoulos, H. N. (2017) Identification of workstations in earthwork operations from vehicle GPS data. *Automation in Construction* 83, 237-246.
29. Rahmani, M., Koutsopoulos, H. N. and Jenelius, E. (2017) Travel time estimation from sparse floating car data with consistent path inference: A fixed point approach. *Transportation Research Part C: Emerging Technologies* 85, 628-643.
30. Zhang, W., Jenelius, E. and Ma, X. (2017) Freight transport platoon coordination and departure time scheduling under travel time uncertainty. *Transportation Research Part E: Logistics and Transportation Review* 98, 1-23.
31. Zhang, Y., Jenelius, E. and Kottenhoff, K. (2017) Impact of real-time crowding information: A Stockholm metro case study. *Public Transport* 9(3), 483-499.
32. Cats, O. and Jenelius, E. (2015) Planning for the unexpected: The value of reserve capacity for public transport network robustness. *Transportation Research Part A: Policy and Practice* 81, 47-61.
33. Jenelius, E. and Cats, O. (2015) The value of new public transport links for network robustness and redundancy. *Transportmetrica A: Transport Science* 11(9), 819-835.
34. Jenelius, E. and Koutsopoulos, H. N. (2015) Probe vehicle data sampled by time or space: Implications for travel time allocation and estimation. *Transportation Research Part B: Methodological* 71, 120-137.
35. Jenelius, E. and Mattsson, L.-G. (2015) Road network vulnerability analysis: Conceptualization, implementation and application. *Computers, Environment and Urban Systems* 49, 136-147.

36. Mattsson, L.-G. and Jenelius, E. (2015) Vulnerability and resilience of transport systems: A discussion of recent research. *Transportation Research Part A: Policy and Practice* 81, 16-34.
37. Rahmani, M., Jenelius, E. and Koutsopoulos, H. N. (2015) Non-parametric estimation of route travel time distributions from low-frequency floating car data. *Transportation Research Part C: Emerging Technologies* 58B, 343-362.
38. Tympakianaki, A., Koutsopoulos, H. N. and Jenelius, E. (2015) c-SPSA: Cluster-wise simultaneous perturbation stochastic approximation algorithm and its application to dynamic origin-destination matrix estimation. *Transportation Research Part C: Emerging Technologies* 55, 231-245.
39. Cats, O. and Jenelius, E. (2014) Dynamic vulnerability analysis of public transport networks: Mitigation effects of real-time information. *Networks and Spatial Economics* 14 (3-4), 435-463.
40. Ding, J., Gao, S., Jenelius, E., Rahmani, M., Huang, H., Ma, L., Pereira, F. and Ben-Akiva, M. (2014) Routing policy choice set generation in stochastic time-dependent networks: Case studies for Stockholm and Singapore. *Transportation Research Record* 2466, 76-86
41. Jenelius, E. and Koutsopoulos, H. N. (2013) Travel time estimation for urban road networks using low frequency probe vehicle data. *Transportation Research Part B: Methodological* 53, 64-81.
42. Jenelius, E. (2012) The value of travel time variability with trip chains, flexible scheduling and correlated travel times. *Transportation Research Part B: Methodological* 46(6), 762-780.
43. Jenelius, E. and Mattsson, L.-G. (2012) Road network vulnerability analysis of area-covering disruptions: A grid-based approach with case study. *Transportation Research Part A: Policy and Practice* 46(5), 746-760.
44. Jenelius, E., Mattsson, L.-G. and Levinson, D. (2011) Traveler delay costs and value of time with trip chains, flexible activity scheduling and information, *Transportation Research Part B: Methodological* 45(5), 789-807.
45. Jenelius, E. (2010) User inequity implications of road network vulnerability, *Journal of Transport and Land Use* 2(3/4), 57-73.
46. Jenelius, E., Westin, J. and Holmgren, Å. J. (2010) Critical infrastructure protection under imperfect attacker perception, *International Journal of Critical Infrastructure Protection* 3, 16-26.
47. Jenelius, E. (2009) Network structure and travel patterns: Explaining the regional disparities of road network vulnerability, *Journal of Transport Geography* 17, 234-244.
48. Holmgren, Å. J., Jenelius, E. and Westin, J. (2007) Evaluating strategies for defending electric power networks against antagonistic attacks, *IEEE Transactions on Power Systems* 22, 76-84.
49. Jenelius, E., Petersen, T. and Mattsson, L.-G. (2006) Importance and exposure in road network vulnerability analysis, *Transportation Research Part A: Policy and Practice* 40(7), 537-560.

Publications in International Conference Proceedings

1. Badia, H. and Jenelius, E. (2020) Feeder transit services in different development stages of automated buses: comparing fixed routes versus door-to-door trips. *Transportation Research Procedia* 47, 521-528.
2. Leffler, D., Burghout, W., Cats, O. and Jenelius, E. (2020) Distribution of passenger costs in fixed versus flexible station-based feeder services. *Transportation Research Procedia* 47, 179-186.
3. Cebecauer, M., Jenelius, E., Babicheva, T., Leffler, D. and Burghout, W. (2020) Public transport disruption management by collaboration with demand responsive services. Transportation Research Board (TRB) 99th Annual Meeting.
4. Laskaris, G., Cats, O., Jenelius, E., Rinaldi, M. and Viti, F. (2020) Real-time holding control for multiline networks. Transportation Research Board (TRB) 99th Annual Meeting.

5. Peftitsi, S., Jenelius, E. and Cats, O. (2020) Evaluating crowding in individual train cars using a dynamic transit assignment model. Transportation Research Board (TRB) 99th Annual Meeting.
6. Cebecauer, M., Gundlegård, D., Jenelius, E. and Burghout, W. (2019) 3D speed maps for short-term urban traffic prediction. Transportation Research Board 2019 Annual Meeting.
7. Cebecauer, M., Jenelius, E. and Burghout, W. (2018) Spatio-temporal partitioning of large urban networks for travel time prediction. *2018 21st International Conference on Intelligent Transportation Systems (ITSC)*, pp. 1390-1395.
8. Jenelius, E. (2018) Car-specific metro train crowding prediction based on real-time load data. *2018 21st International Conference on Intelligent Transportation Systems (ITSC)*, pp. 78-83.
9. Tympakianaki, A., Koutsopoulos, H. N. and Jenelius, E. (2018) Robust SPSA algorithms for dynamic OD matrix estimation. *Procedia Computer Science* 130, pp. 57-64.
10. Zhang, W., Jenelius, E. and Badia, H. (2018) Efficiency of semi-autonomous platooning vehicles in high-capacity bus services. OR 2018, Brussels, Belgium, 12-14 September 2018.
11. Fu, J. and Jenelius, E. (2017) Transport efficiency of off-peak urban goods deliveries: A Stockholm pilot study. Transportation Research Board Annual Meeting 2017 Paper #17-4109.
12. Jenelius, E., Kristoffersson, I. and Fransson, M. (2017) Validation of traffic simulation models based on the macroscopic fundamental diagram. *Transportation Research Procedia* 27, pp. 561-568.
13. Leffler, D., Cats, O., Jenelius, E. and Burghout, W. (2017) Real-time short-turning in high frequency bus services based on passenger cost. *5th IEEE International Conference on Models and Technologies for Intelligent Transportation Systems (MT-ITS)*, pp. 861-866.
14. Rodriguez-Deniz, H., Jenelius, E. and Villani, M. (2017) Urban network travel time prediction via online multi-output Gaussian process regression. *Intelligent Transportation Systems (ITSC), 2017 IEEE 20th International Conference on*.
15. Fu, J., Jenelius, E. and Koutsopoulos, H. N. (2016) Identification of workstations in earthwork operations from vehicle GPS data. Transportation Research Board Annual Meeting 2016 Paper #16-1272.
16. Fu, J., Jenelius, E. and Koutsopoulos, H. N. (2016) Driving time and path generation for heavy construction sites from GPS traces. *2016 IEEE International Conference on Intelligent Transportation Systems (ITSC)*, pp. 1141-1146.
17. Laskaris, G., Cats, O., Jenelius, E. and Viti, F. (2016) A real-time holding decision rule accounting for passenger travel cost. *2016 IEEE International Conference on Intelligent Transportation Systems (ITSC)*, pp. 2410-2415.
18. Zhang, W., Ma, X. and Jenelius, E. (2016) Planning of heavy-duty vehicle platoon formulation: basic scheduling problem considering travel time variance. Transportation Research Board Annual Meeting 2016 Paper #16-6899.
19. Ding, J., Gao, S., Jenelius, E., Rahmani, M., Pereira, F. and Ben-Akiva, M. (2015) Latent-class routing policy choice model with revealed-preference data. Transportation Research Board Annual Meeting 2015 Paper #15-1963.
20. Cats, O. and Jenelius, E. (2014) The value of new cross-radial links for public transport network resilience. Vulnerability, Uncertainty, and Risk: Quantification, Mitigation, and Management - *Proceedings of the 2nd International Conference on Vulnerability and Risk Analysis and Management, ICVRAM 2014 and the 6th International Symposium on Uncertainty Modeling and Analysis, ISUMA 2014*, ASCE, pp. 638-647.
21. Rahmani, M., Jenelius, E. and Koutsopoulos, H. N. (2014) Floating car and camera data fusion for non-parametric route travel time estimation. *Proceedings of the 17th International IEEE Annual Conference on Intelligent Transportation Systems (ITSC 2014)*, pp. 1286-1291.

22. Rahmani, M., Jenelius, E. and Koutsopoulos, H. N. (2013) Route travel time estimation using low-frequency floating car data. *Proceedings of the 16th International IEEE Annual Conference on Intelligent Transportation Systems (ITSC 2013)*, The Hague, The Netherlands, October 6-9 2013, pp. 2292-2297.
23. Jenelius, E. and Koutsopoulos, H. N. (2012) Time-based vs. distance-based sampling in probe vehicle data: Implications for travel time estimation. *Proceedings of the 17th International Conference of Hong Kong Society for Transportation Studies*, pp. 185–192.
24. Jenelius, E., Rahmani, M. and Koutsopoulos, H. N. (2011) Travel time estimation for urban road networks using low frequency GPS probes. Transportation Research Board Annual Meeting 2012 Paper #12-3159.
25. Jenelius, E. (2010a) Redundancy importance: Links as rerouting alternatives during road network disruptions, *Procedia Engineering* 3, 129–137.

Appropriated Funds

1. *Modellering av mikromobilitet (M3): Resmönster, potential och utformning av delade elskotertjänster* (PI), 2021-2023, 2.2 million SEK. Funding entity: Swedish National Transport Administration.
2. *Smarta bytespunkter 2* (co-PI), 2020-2022, 4.6 million SEK (total). Funding entity: Swedish National Transport Administration.
3. *Smart City Concepts in Curitiba - Low-carbon transport and mobility in a digital society (co-PI)*, 2020-2023. Funding entity: Swedish Governmental Agency for Innovation Systems (Vinnova) (grant no. 2019-04893).
4. *Sustainable and Integrated Urban Transport Systems - HITS2024* (co-PI), 2020-2022, 70 million SEK (total). Funding entity: Swedish Governmental Agency for Innovation Systems (Vinnova) (grant no. 2020-00565).
5. *Unravelling travel demand patterns using Access card data* (co-PI), 2020-2021, 1,5 million SEK. Funding entity: Region Stockholm (grant no. RS 2019-0499).
6. *BIG BRO 2.0: Decision Support for Maintenance and Upgrading of Existing Transportation Infrastructure* (2019-2021). Funding entity: Swedish National Transport Administration (Trafikverket) and Swedish Governmental Agency for Innovation Systems (Vinnova).
7. *Modellering av mikromobilitet (M3): Förstudie om kunskapsbehov och användningsmönster* (PI), 2019-2020, 0.5 million SEK. Funding entity: Swedish National Transport Administration.
8. *Prediktions- och scenariobaserad trafikledning 2 (POST2)* (co-PI), 2019-2021, 4.0 million SEK (total). Funding entity: Swedish National Transport Administration.
9. *Simulation and Modelling of Automated Road Transport 2 (SMART2)* (co-PI), 2019-2021, 4.27 million SEK (total). Funding entity: Swedish National Transport Administration.
10. *Smarta bytespunkter* (co-PI), 2019-2021, 4.6 million SEK (total). Funding entity: Swedish National Transport Administration.
11. *Självkörande fordon och kollektivtrafik – hot och möjligheter* (co-PI), 2018-2019, 1.0 million SEK (total). Funding entity: Stockholms Läns Landsting (SLL).
12. *Skattning av resmönster och effekten av biljettprissättning för olika användargrupper i Stockholm baserat på Access-data* (co-PI), 2018-2019, 1.5 million SEK. Funding entity: Stockholms Läns Landsting (SLL).
13. *Prestudy of Data Sharing for Demand-Responsive and Public Transport System-of-Systems (SHARP)* (PI), 2018-2019, 0.3 million SEK. Funding entity: Vinnova (FFI).
14. *Bilrestider i storstad: variationsmönster och upplevd osäkerhet (VARIA)* (PI), 2018-2020, 1.26 million SEK (total). Funding entity: Swedish National Transport Administration.

15. *Modellering av samband mellan trängsel i bytespunkter och i fordon* (PI), 2017-2018, 1.7 million SEK. Funding entity: Stockholms Läns Landsting (SLL), Centre for Transport Studies (CTS).
16. *iQMobility: Automatiserad kollektivtransportlösning för bussar i storstadsmiljö* (co-PI), 2016-2020, 17.5 million SEK (total). Funding entity: Vinnova (FFI),
17. *Dynamiska trängselindex och adaptiva trängselavgifter* (PI), 2015-2017, 0.95 million SEK (total). Funding entity: Swedish National Transport Administration.
18. *Off-peak citydistribution* (co-PI), 2015-2016, 3.4 million SEK (total). Funding entity: FFI (FIFFI).
19. *Anatomy of Tunnel Closures* (co-PI). 2015-2016, 1.7 million SEK. Funding entity: Google Ireland Limited,
20. *Adapt-IT (Analysis and Development of Attractive Public Transport through Information Technology)* (PI), 2014-2017, 1.4 million SEK. Funding entity: Vinnova (Eranet Transport Future Travelling).
21. *Optimerad masstransport i dynamiska miljöer* (Co-PI), 2014-2017, 6 million SEK (total). Funding entity: Vinnova (FFI),
22. *Högfrekvent infrastrukturövervakning av väg- och trafikinformation* (Co-PI), 2013-2015, 1.5 million SEK (total). Funding entity: Vinnova (Forska & växa),
23. *Trängselindex för uppräkning av trängselskatt* (PI) , 2012, 0.1 million SEK. Funding entity: City of Stockholm through Centre for Transport Studies (CTS).

National and International Awards

2019-2020: Ranked among the top 1-percentile scientists internationally for citation impact in the field Logistics and Transportation by Iannidis et al. (2020, 2021).

2019: Ranked as the 4th most highly cited Swedish researcher in the social sciences by news magazine Fokus.

2019: ITS Bavaria Best Paper Award at mobil.TUM conference, Munich, 11-12 September 2019.

2018: Nominated by the President of KTH to *Pro Futura Scientia XIV*, a national cutting-edge research program for young researchers in humanities and social sciences. First candidate ever nominated by KTH to the program.

2018: Paper "Importance and exposure in road network vulnerability analysis" (Jenelius et al. 2006) announced as one of ten "Classic Papers in Transportation" by Google Scholar.

Assignments as Reviewer / Independent Expert

2021: Expert reviewer for Israeli Smart Transportation Research Center (ISTRC) Annual Call for Research 2020-2021.

2020: Expert reviewer in project mid-term evaluation for K2, Sweden's national centre for research and education on public transport

2019-2021: Expert reviewer for Research Grants Council (RGC) of Hong Kong.

2019: Expert reviewer for ERC Consolidation Grant.

2017: External reviewer of two different project proposals for the Netherlands Organisation for Scientific Research (NOW) domain Applied and Engineering Sciences (TTW).

2015: External reviewer for the German Academic Exchange Service (DAAD) programme P.R.I.M.E. (Postdoctoral Researchers International Mobility Experience), co-financed by the Marie Curie Programme of the European Commission.

Recurrent reviewer assignments in international scientific journals including Transportation Research Part A-D, IEEE Transactions on Intelligent Transportation Systems, Transportmetrica A-B.

Assignments as Public Examiner/Opponent

2021: Evaluation Committee Member of Alfred Söderberg (main supervisor Lena Winslott Hiselius), PhD thesis, Lund University, May 2021.
2021: Evaluation Committee Member of Chei Pee Nen (main supervisors Wong Yiik Diew and Yusak Susilo), PhD thesis, Nanyang Technological University, Singapore, April 2021.
2021: Examiner of Johan Nygren (main supervisor Susann Boij), Licentiate thesis, KTH Royal Institute of Technology, April 2021.
2021: Evaluation Committee Member of Kam Fung Cheung (main supervisor Professor Michael Bell), PhD thesis, The University of Sidney, March 2021.
2021: Evaluation Committee Member of Rafael Basso (main supervisor Professor Balázs Kulcsár), PhD thesis, Chalmers University of Technology, February 2021.
2020: Evaluation Committee Member of Can Yang (main supervisor Professor Yifan Ban), PhD thesis, KTH Royal Institute of Technology, December 2020.
2020: Evaluation Committee Member of Morten Eltved (main supervisor Professor Otto Ancker Nielsen), PhD thesis, Technical University of Denmark (DTU), November 2020.
2020: Evaluation Committee Member of Álvaro Torres Amaya (main supervisor Professor Alexandre de Almeida Prado Pohl), qualifying PhD thesis, Federal University of Technology – Paraná (UTFPR), Brazil, October 2020.
2020: Evaluation Committee Member of Ding Luo (main supervisor Professor Hans van Lint), PhD thesis, Technical University of Delft, February 2020.
2019: Opponent of Therese Lindberg, Licentiate thesis (supervisors Jan Lundgren, Anders Peterson and Andreas Tapani), Department of Science and Technology, Linköping University, May 2019.
2019: Evaluation Committee Member of Ioulia Markou (main supervisor Professor Francisco Pereira), PhD thesis in Transport Modelling, Department of Management Engineering, Technical University of Denmark (DTU), April 2019.
2018: Opponent at midterm PhD seminar for Dennis Dreier (main supervisor Professor Mark Howells), Department of Energy Technology, School of Industrial Engineering and Management, KTH, March 2018.
2017: Examiner of Nadia Viljoen, PhD thesis in Industrial Engineering (supervisor Professor Johan W. Joubert), Department of Industrial and Systems Engineering, Faculty of Engineering, Built Environment, and Information Technology, University of Pretoria, 2017.
2013: Examiner of Sally Freeman, Master of Engineering (Civil) Thesis (supervisor Professor Michael Taylor), University of South Australia, 2013.
Internal KTH advance reviewer of several Licentiate theses and Doctoral theses.

Other Scientific Work

2021: Chair of local organizing committee of *8th International Symposium on Transport Network Reliability (INSTR)*, Stockholm, 16-18 June 2021.
2020: Member of KTH Scientific Council for the City of Stockholm, fossile-free and accessible transport and mobility.
2020- Associate Editor for *Journal of Advanced Transportation*.
2019- Associate Editor for *IEEE Open Journal of Intelligent Transportation Systems*.
2018- Member of the International Scientific Committee of the International Symposium on Transport Network Reliability (INSTR).

2016- Member of the reference group for RCAM, the Reliability Centered Asset Management group at the Division of Electromagnetic Engineering, KTH.

2017: Main organizer of International Workshop on *Advances in Public Transport Control and Operations*, KTH, 16 June 2017.

2015: Co-organizer of the *ICT for Transport* Workshop organized by the ICT platform at KTH, 4 March 2015.

Teaching

2018- *AH1025 Public Transport Systems, Buses and Rail, BC*, KTH. Roles: Examiner, teacher. Level: First cycle. Credits: 7.5 ECTS. Language: Swedish

2016- *AH2173 Public Transport*, KTH. Roles: Examiner, course responsible, teacher. Tasks: Course design, teaching 5-6 lectures/year, grading, examination, course evaluation. Programme: Master's Programme, Transport and Geoinformation Technology, 120 credits, year 1, Conditionally Elective. Level: Second cycle. Credits: 7.5 ECTS. Language: English

2012–2015 *AH1023 Urban and Traffic Planning: Methods and Applications*, KTH. Roles: Course responsible, teacher. Tasks: Course design, teaching 5-6 lectures/year, grading, course evaluation. Programme: Degree Programme in Civil Engineering and Urban Management, year 3, SPL, TTK, Mandatory. Level: First cycle. Credits: 7.5 ECTS. Examiner: Albania Nissan. Language: Swedish

2012, 2016–2018 *AH2170 Transport Data Collection and Analysis*, KTH. Roles: Course responsible, teacher. Tasks: Course design, teaching 5-6 lectures/year, grading, course evaluation. Programme: Master's Programme, Transport and Geoinformation Technology, 120 credits, year 1, Mandatory. Level: Second cycle. Credits: 7.5 ECTS. Examiner: Haris Koutsopoulos (2012), Per Näsman (2016), Anders Karlström (2017). Language: English

2013–2015 *AH2177 Transport and Geodata Analysis*, KTH. Roles: Course responsible, teacher. Tasks: Course design, teaching 5-6 lectures/year, grading, course evaluation. Programme: Master's Programme, Transport and Geoinformation Technology, 120 credits, year 1, Conditionally Elective. Level: Second cycle. Credits: 6 ECTS. Examiner: Joel Franklin. Language: English

2018- *AH2174 Traffic Simulation Modelling and Applications*, KTH. Roles: Examiner, teacher. Credits: 7.5 ECTS. Language: English

2018- *AH101X Degree Project in Civil Engineering, First Cycle*, KTH. Roles: Examiner, supervisor. Credits: 15.0 ECTS. Language: Swedish

2017- *AH203X Degree Project in Transport Science, Second Cycle*, KTH. Roles: Examiner, supervisor. Credits: 30 ECTS

2017- *AH201X Degree Project in Traffic and Transport Planning, Second Cyvle*, KTH. Roles: Examiner, supervisor. Credits: 30 ECTS

2018- *FAH3002 Traffic Simulation Modelling and Applications*, KTH. Role: Examiner. Level: Third cycle. Credits: 7.5 ECTS. Language: English

2018- *FAH3460 Topics in Transport Science, Part 1*, KTH. Roles: Examiner, course responsible. Level: Third cycle. Credits: 3.5 ECTS. Language: English

2018- *FAH3462 Topics in Transport Science, Part 2*, KTH. Roles: Examiner, course responsible. Level: Third cycle. Credits: 4.0 ECTS. Language: English

2018- *FAF3811 Short Literature Course in Transport Planning*, KTH. Role: Examiner. Level: Third cycle. Credits: 4.0 ECTS. Language: English

2018- *FAF3812 Literature Course in Transport Planning*, KTH. Role: Examiner. Level: Third cycle. Credits: 7.5 ECTS. Language: English

Supervision

Doctoral Theses

2021: Matej Cebecauer, *Enhancing Short-Term Traffic Prediction for Large-Scale Transport Networks by Spatio-Temporal Clustering*, KTH. Main supervisor.
2019: Giorgos Laskaris, *Multiline Holding Control and Integration of Cooperative-ITS*, University of Luxembourg. Co-supervisor. Main supervisor: Prof. Francesco Viti, University of Luxembourg.
2019: Wei Zhang, *Planning and Evaluation of Autonomous Vehicles in Freight and Public Transport Services*, KTH. Main supervisor.
2018: Athina Tympakianaki, *Demand Estimation and Bottleneck Management Using Heterogeneous Traffic Data*, KTH. Co-supervisor. Main supervisor: Prof. Haris Koutsopoulos.
2017: Jiali Fu, *Evaluating and Improving the Transport Efficiency of Logistics Operations.* KTH. Co-supervisor. Main supervisor: Prof. Haris Koutsopoulos.
2015: Mahmood Rahmani, *Urban Travel Time Estimation from Sparse GPS Data: An Efficient and Scalable Approach,* KTH. Co-supervisor. Main supervisor: Prof. Haris Koutsopoulos.

Licentiate theses

Jonas Hatzenbühler, *Transition towards Fixed-Line Autonomous Bus Transportation Systems*, KTH, 2020. Main supervisor.
Soumela Peftitsi, *Simulation and Evaluation of Urban Rail On-Board Crowding*, KTH, 2019. Main supervisor.
David Leffler, *Simulation Based Evaluation of Flexible Transit*, KTH, 2019. Main supervisor.
Matej Cebecauer, *Short-Term Traffic Prediction in Large-Scale Urban Networks*, KTH, 2019. Main supervisor.
Jiali Fu*, Logistics of Earthmoving Operations: Simulation and Optimization*, KTH, 2013. Co-supervisor. Main supervisor: Prof. Haris Koutsopoulos.

Master's and Bachelor's theses

Boel Berg Wincent, *Bus Rapid Transit design parameters and their impact on travel times: A micro-simulation study of boarding and alighting through all doors and bus lanes*, 2021. MSc thesis, 30 credits.
Robert Günther Klar, *Geographically Weighted Regression based Investigation of Transport Policies for Increased Public Transport Ridership: A Case Study of Stockholm*, 2021. MSc thesis, 30 credits.
Benny Lam and Shiyi Peng, *Developing A Network Algorithm for Demand Responsive Transit Service in A Rural Area of Sweden*, 2021. MSc thesis, 30 credits.
Erik Lansner, *Investigating usage patterns of shared electric scooters in Stockholm*, 2021. MSc thesis, 30 credits.
Karl Kvarnefalk, *Självkörande bussars påverkan på Stockholms stomlinjer*, 2021. BSc thesis, 15 credits.
Francisco Caron Malucelli, *A BRT Corridor Through Stockholm's Inner-city: Assessing the Operational Impacts of a BRT Corridor Along Bus Line 4 Using Microscopic Simulation*, 2020. MSc thesis, 30 credits.
Alaa Eltayeb, *Implementing Crowding in SL's traffic models Case study: Stockholm Public Transport Network*, 2020. MSc thesis, 30 credits.
Kevin Lloret Gonzales, *Robustness simulation of bus crew schedules,* 2019. MSc thesis, 30 credits.

Karim Ounsi, *Geographically Weighted Regression as a Predictive Tool for Station-Level Ridership: the Case of Stockholm*, 2019. MSc thesis, 30 credits.

Marc Urtasun López, *Analysis of Autonomous Buses' Impact on Transportation between Stockholm's Universities*, 2019. BSc thesis, 15 credits.

Wentao Yang, *Simulation-based evaluation of a new floating vehicle speeding detection method*. MSc thesis, 30 credits.

Boel Berg Wincent, *Gångavstånd för resor med elsparkcykel*, 2019. BSc thesis, 15 credits.

Anna Enström, *The Effect of Departure Time Distribution on the Efficiency of an Autonomous Mobility on Demand Service in Stockholm*, 2019. MSc thesis, 30 credits.

Giorgos Laskaris, *A Real Time Control Strategy for Multiple Bus Routes using a Shared Transit Corridor*, 2016. MSc thesis, 30 credits.

Héctor Rodríguez-Déniz, *Urban Traffic Prediction via Gaussian Process Regression.* Division of Statistics and Machine Learning, Linköping University, 2016. MSc thesis, 30 credits.

Pierre Villaume, *Four Innovative Proposals to Enhance the Tram Priority Request System in Paris*, 2015. MSc thesis, 30 credits.

Luke Hobbs, *Vulnerability in the Public Transport Networks of Amsterdam and Stockholm*, 2015. MSc thesis, 30 credits.

Zhouran Li, *The Efficiency of Off-peak Deliveries in Stockholm City*, 2015. MSc thesis, 30 credits.

Abraham Josue Rondon Sosa, *The Impact of Weather Conditions on Urban Travel Speed using ANPR Observations*, 2014. MSc thesis, 30 credits.

Käti Lingenäs Güthlein, *Gröna resplaner: Vilken inverkan nationella och lokala myndigheter kan ha på en privat eller offentlig verksamhets motivation att anta en grön resplan*, 2013. MSc thesis, 30 credits.

Molley Morgan, *Short Term Labor Supply: When Do Stockholm Taxi Driver's Stop Working?* Dept. of Spatial Economics, VU Amsterdam, 2012. MSc thesis, 30 credits.

Doctoral students at present being supervised

Boel Berg Wincent: PhD (Licentiate) in Transport Science, KTH, expected 2023. Main supervisor.

Jonas Hatzenbühler: PhD in Transport Science, KTH, expected 2022. Main supervisor.

Soumela Peftitsi: PhD in Transport Science, KTH, expected 2022. Main supervisor.

David Leffler: PhD in Transport Science, KTH, expected 2022. Main supervisor.

Erik Almlöf: PhD in Machine Design, KTH, expected 2024. Co-supervisor. Main supervisor: Anna Pernestål Brenden.

Raphael Andreolli: PhD in Vehicle and Maritime Engineering, KTH, expected 2026. Co-supervisor. Main supervisor: Mikael Nybacka.

Education and Outreach Presentations

I have been featured in the following media:

Dagens Nyheter National daily newspaper, 29 June 2020, "Guldbron är en dödsstöt mot klimatmålen". (URL: https://www.dn.se/kultur-noje/claes-britton-guldbron-ar-en-dodsstot-mot-klimatmalen/)

Mitti Stockholm newspaper, 25 April 2017, "Trött på bilköer? Kör mer som en robot!" (URL: https://mitti.se/nyheter/trafik/trott-bilkoer-robot/)

KTH Forskningsnyheter, 20 November 2015, "Skingrar bilköerna med mobilens hjälp".

Vetenskapsradion, Swedish Public Radio P1, 4 June 2014, "Big data kan förutse bilköer".

TV4 vetenskap/TV4 Stockholm News 26 September 2012.

Res Forum/Trafik Forum 26 September 2012, "Forskarhjälp undan bilköer".

Taxi idag, issue 7/2012, “GPS-data från taxi kan underlätta framkomligheten”.

Management and Collaboration

2019- Head of the Division of Transport Planning, KTH. Steering group member of the Department of Civil and Architectural Engineering, KTH.
2021- Steering group member of Transport Research Environment with Novel Perspectives (TRENoP), KTH.
2021- Digital Futures Faculty member.
2018- Board Member of Centre for Traffic Research (CTR), KTH.