Dr Andrés Salomón Fielbaum Schnitzler

Curriculum Vitae

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Summary

Senior Lecturer at the School of Civil Engineering at the University of Sydney. Mathematical Engineer, M.Sc. in Transports Engineering and Ph.D. in Systems Engineering, all approved with highest distinction at Universidad de Chile. Experience as a postdoc at TU Delft, main and assistant external lecturer in Universidad Santa María and Universidad de Chile, and as a researcher in Universidad de O'Higgins. Recipient of an ARC DECRA Fellowship 2025-2027, Co-author of the best IEEE-TAS paper in 2023, and first prize as young researcher for World Conference on Transport Research Conference 2019. Researcher in public transport, transport economics, combinatorial optimization and transport networks.

Personal information

Full name: Andrés Salomón Fielbaum Schnitzler.
Date of birth: January 15th, 1987.
Nationality: Chilean/German.

Research interests

Public transport, Combinatorial optimization, Transport economics, Transport algorithms and dynamics, New transport technologies, Urban-transport interactions.

Timeline

2005-2010 Mathematical Engineering student

2010-2013 Student leadership at a Faculty, University and national level

2011-2014 M.Sc. in Transports Engineering student

2014-2015 Work as a researcher at ISCI (Institute of Complex Systems Engineering) in Universidad de Chile

2015-2018 Lecturer of Probabilities and Statistics at Universidad Federico Santa María

2015-2019 Ph.D. in Engineering Systems student

2017-2019 Lecturer of a practical workshop at Universidad de Chile

2019-2019 Work as a researcher at Universidad de O'Higgins

2019-2023 Postdoc at the Cognitive Robotics Department, TU Delft

2023-2025 Lecturer at the School of Civil Engineering, University of Sydney

2026- Senior Lecturer at the School of Civil Engineering, University of Sydney

Education

- Mathematical Engineer, Universidad de Chile, 2014. Thesis: Identificación y análisis de estructuras óptimas de líneas de transporte público en redes representativas con demanda paramétrica [Identification and analysis of optimal lines structures for public transport systems, over representative networks with parametric demand].
- Master in Transport Engineering, Universidad de Chile, 2014. Same thesis than for the Mathematical Engineer degree.
- Ph.D. in Systems Engineering, Universidad de Chile, 2019. Thesis: Effects of the introduction of spatial and temporal complexity on the optimal design, economies of scale and pricing of public transport.

Lecturing experience and certifications

- Transport Systems, University of Sydney, 2024.
- Transport Networks, University of Sydney, 2023 – Present.
- Practical workshop: Design of a public transport system for Santiago. Universidad de Chile, 2017-2019.

- Probabilities and Statistics, Universidad Federico Santa María, campus San Joaquín. 2015-2018.
- More than 10 courses as a tutor at Universidad de Chile, 2007-2011.
- Participated in several thesis committees.
- Completion of the University of Sydney's program "Principles & Practice Teaching and Learning Program" for educators.

PhD, MPhil, and Visiting students

Current:

- Regine Tejada, PhD student, University of Sydney.
- Amir Elmi, PhD student, University of Sydney
- Haoran Zhao, PhD student, University of Sydney
- Ricardo Wang, PhD student, University of Sydney
- Valentina Gómez, PhD student, University of Sydney
- Zixuan Yang, MPhil student, University of Sydney

Past:

- Jaime Rodríguez, Visiting student, Universidad de O'Higgins
- Tristan Lemoalle, Visiting student, ENTPE France

Supervised theses/capstones

- Alexandra Waters (University of Sydney, finished 2025), entitled: "Going the Extra Mile: Driver Distribution for Improved Matching in Ride-hailing".
- Ahaan Gautam (University of Sydney, finished 2025), entitled: "The Simulation of a Hybrid Design Integrating Flexible Buses and Conventional Buses".
- Leanna Tan (University of Sydney, finished 2025), entitled: "The impact of socio-economic inequality in Australia on ride-hailing trips".
- Xiang Wang (University of Sydney, finished 2025), entitled: "Valuation of Reliability in On-demand Ridesharing Systems Based on a Stated Preference Survey of University Students in Sydney".
- Francisco Vilches (U. de Chile, graduated 2025), entitled: "Shared mobility systems with hierarchical pickup and dropoff points".
- Minjun Song (University of Sydney, finished 2024), entitled: "Analysing the effects of food delivery systems on food delivery worker's behaviour to improve safety".
- Albert Xu (University of Sydney, finished 2024), entitled: "Implementation of Ridesharing Problem with PUDO location selection".

- Marc Awad, Bob Sheng (University of Sydney, finished 2024), entitled: "Analysis of Commuter Mode Choice with and without Real-Time Park and Ride Information".
- Raisa Raihan (University of Sydney, finished 2024), entitled: "The Impact of Real-Time Information on Route Choice in Public Transport".
- Tajwar Selim (University of Sydney, finished 2024), entitled: "Unveiling Origin-Destination Dynamics: Deterministic and Stochastic Decomposition via eRPCA".
- Tommy Lo (University of Sydney, finished 2024), entitled: "Improving the Vessel Operation and Berth Capacity Utilization for Sydney Ferries by an Integer Linear Programming Model".
- Matías Salinas (U. de Chile, graduated 2024), entitled: "A proposal to integrate shared on-demand mobility in Punta Arenas".
- Valentina Gómez (U. de Chile, graduated 2023), entitled: "New heuristics for the strategic design of public transport networks".
- Nander Theodoridis (TU Delft, graduated 2022), entitled: "Incorporation of Reservations in an on-Demand Ridesharing System".
- Mees Matthieu (TU Delft, graduated 2022), entitled: "Shared Mobility-on-Demand Systems: Reducing Service Unreliability".
- Pieter Schuller (TU Delft, graduated 2021), entitled: "Fairness in Mobility on Demand Systems with Ride-Sharing".

Awards, Scholarships and Projects

Highlights

- Included in the Stanford–Elsevier 2025 Top 2% Scientists global ranking.
- NWO Open Technology Program 2025-2028, “Design of Mixed Flexible-Fixed Public Transport Networks (FlexMobility)” (€900k).
- ARC DECRA Fellowship 2025-2027, “Next generation of on-demand public transport: Strategies and algorithms” (AUD$466,331).
- Prize “Cátedra Abertis-PUC” 2020, to the best thesis in transportation science defended in Chile during 2019.
- First prize among PhD students worldwide to attend the World Conference on Transport Research 2019.

Full list

- Co-author of the Best paper on the Human-Centred Mobility Stream at TRANSW Symposium 2025, “Which bike-train integration strategy is most suitable in a city? A cost comparison using continuous approximation”, presented by Ms Regine Tejada.
- Faculty commendation for my teaching of the course Transport Networks in 2024 at the University of Sydney.

- Co-author of the best 2023 paper published on IEEE Transactions on Automation Science "Group-Based Distributed Auction Algorithms for Multi-Robot Task Assignment".
- Partner Investigator, FTRG Collaboration Grant 2024, University of Sydney, "Dynamic pricing, routing, and charging in on-demand shared mobility" (AUD$10k).
- Co-author of the Best paper presented by a young researcher in the 2023 Chilean Congress on Transport Engineering, "Ride-sharing systems with hierarchical pickup and drop-off points" presented by Mr Francisco Vilches.
- Postdoc 2019-2023 in the project "Postdoc: Shared Mobility-on-Demand under Uncertainty", in collaboration with Didi Udian Shenzhen.
- Scholarship provided by the University for my Ph.D. studies.
- Scholarship provided by the Government for my M.Sc. studies.
- Ranked first among my cohort in all my academic degrees.
- Students' honour list, Universidad de Chile, 2005-2009.
- National score at the Chilean Test to apply to Universities (2004).

Academic presentations

A. Invited talks

- School of Economics and Management, Tongji University (Shanghai, China), July 2025. "Temporal Friction in On-demand Assigned Mobility: Short-term decisions, long-term dynamics, and the limits of optimisation".
- College of Transportation, Tongji University (Shanghai, China), July 2025. "Finding Modern Answers through a Classical Public Transport Model".
- DSI Seminar Series, Universidad de Chile, May 2024. "Transforming Public Transport: The Role of On-Demand Mobility in Network Design".
- Monash University, October 2023. "Transforming Public Transport: The Role of On-Demand Mobility in Network Design".
- rCITI Seminar Series, University of New South Wales, May 2023. "'Combining traditional public transport with on-demand shared mobility".
- TransportLab Seminar Series, University of Sydney, April 2023. "'Towards the utilisation of on-demand ridepooling in public transport systems".
- Learning and Autonomous Control Seminar Series, TU Delft, January 2023. "'Towards the utilisation of on-demand ridepooling in public transport systems'

- Talk at Eindhoven AI Systems Institute, TU Eindhoven, November 2022. “Towards integrating on-demand pooled services into public transport networks”.
- AGCO (Algorithms, Combinatorics, Game Theory and Optimization) Seminar Series, Universidad de Chile, April 2022. “How to split the costs and charge the travellers sharing a ride? aligning system’s optimum with users’ equilibrium”.
- Optimization and Algorithms Seminar Series, Universidad de O’Higgins, March 2022. “Improving the assignments between users and vehicles in on-demand ridepooling”.
- Transportation Seminar Series, Universidad de Chile, March 2022. “On-demand ridepooling: Potential and challenges”.
- Talk at Georgia Tech, March 2022. “On-demand ridepooling: Potential and challenges”.
- Talk at University of Maryland, March 2022. “On-demand ridepooling: Potential and challenges”.
- Learning and Autonomous Control Seminar Series, TU Delft, November 2021. “Analysis and improvement of on-demand ridepooling systems”.
- Smart Public Transport Lab Webinar Series, TU Delft, September 2021. “Strategic design of public transport networks, frequencies and bus sizes”.
- Vrije Universiteit Amsterdam Eureka Webinar Series, January 2021: “New sources of unreliability in on-demand ridesharing systems”.
- Working for an app-based company in Chile Seminar Series, Universidad Autónoma de Chile, October 2020. “Algorithms and workers’ rights”.
- AGCO (Algorithms, Combinatorics, Game Theory and Optimization) Seminar Series, Universidad de Chile, June 2020. “A Water-Filling Primal-Dual Algorithm for Approximating Non-Linear Covering Problems”.
- Operations Research Privatissimum, Technical University of Munich, November 2018. “Optimal design for a public transport bus system considering routes, frequencies and vehicle sizes in a general city model”.
- Ph.D. in Systems Engineering Seminar Series, Universidad de Chile, May 2017. “Identification and analysis of optimal lines structures for public transport, in representative networks with parametric demand”.

B. Regular presentations in Conferences

- 46th Australasian Transport Research Forum, November 2025, Auckland, New Zealand. “Analysis of commuter mode choice with and without real-time Park-and-Ride information”.
- 12th Triennial Symposium on Transportation Analysis conference (TRISTAN XII), June 2025. Okinawa, Japan. “Selecting an optimal set of shared ridepooling stops”.

- 25th International Symposium on Transportation and Traffic Theory, July 2024, Ann Arbor, USA. "Design of mixed fixed-flexible bus public transport networks by tracking the paths of on-demand vehicles".
- Dagstuhl Seminar on Dynamic Traffic Models in Transportation Science, July 2024, Wadern, Germany, "Optimising public transport networks that integrate on-demand mobility".
- Transit Data, July 2024, London, UK "On the relationship between free public transport, stop spacing, and optimal frequencies".
- Online Technical Conferences of AITPM, February 2024. "On the relationship between free public transport, stop spacing, and optimal frequencies".
- Australasian Transport Research Forum, December 2024, Perth, Australia. "Quantifying the benefits of short-term reservations in on-demand ridepooling".
- Bridging Transportation Researchers, August 2023, Online. "Pareto-improvement of public transport via line-based integration of on-demand ridepooling".
- World Conference on Transport Research, July 2023, Montreal, Canada. "Will shared automated vehicles reduce the total vehicle kilometres? A theoretical analysis".
- 23rd Conference of the International Federation of Operational Research Societies IFORS, July 2023, Santiago, Chile. "'Pareto-improvement of public transport via line-based integration of on-demand ridepooling".

  IATBR 16th Conference, December 2022, Santiago, Chile. "How Openness to Sharing Impacts the Total Vehicle Kilometres with Shared Automated Vehicles: A Theoretical Analysis".

  Bridging Transportation Researchers 2022, August 2022, Online. "Unreliability in ridesharing systems: Measuring changes in users' times due to new requests".

  ITEA Anual Conference and school on Transportation Economics, June 2022, Toulouse, France. "Beyond the last-mile: different spatial strategies to integrate On-Demand services into Public Transport in a simplified city".
- hEART Symposium of the European Association for Research in Transportation, June 2022, Leuven, Belgium. "The job of public transport, ride-hailing and delivery drivers: conditions during the COVID-19 pandemic and implications for a post-pandemic future".
- Chilean Conference on Transportation Engineering 2021, Online (due to COVID-19).

  "Anticipatory routing methods for an on-demand ridepooling mobility system".
- INFORMS Institute for Operations Research and the Management Sciences Annual Meeting 2021, Online (due to COVID-19). "How to split the costs among travellers sharing a ride?

  Aligning system's optimum with users' equilibrium".

- ITEA Anual conference and school on transportation economics, June 2021, Online (due to COVID-19). “New sources of economies and diseconomies of scale in on-demand ridepooling systems and comparison with public transport”.
- ITF Pre-Summit Research Day on Transport Innovation for Sustainable Development: Reshaping Mobility in the Wake of Covid-19 2021, Online (due to COVID-19). “Driving in the middle of a pandemic: Public transport, ride-hailing and delivery drivers during COVID-19 in Santiago, Chile”
- hEART Symposium of the European Association for Research in Transportation 2020, Online (due to COVID-19). “Unreliability in ridesharing systems: Measuring changes in users’ times due to new requests”.
- INFORMS Institute for Operations Research and the Management Sciences Annual Meeting 2020, Online (due to COVID-19). “On-demand ridesharing with optimized pick-up and dropoff walking locations”.
- ISTS Integrated and Sustainable Transportation Systems, Online (due to COVID-19). "Optimizing a vehicle’s route in an on-demand ridesharing system in which users might walk".
- ICALP International Colloquium on Automata, Languages and Programming 2020, Online (due to COVID-19). “A water-filling primal-dual algorithm for approximating non-linear covering problems”.
- World Conference on Transport Research 2019, Mumbai, India. “The technical dimensions behind scale economies induced by transit lines structures design”.
- World Conference on Transport Research 2019 (Young Initiative), Mumbai, India. “Public transport design using autonomous vehicles and other new technologies”.
- Workshop of transport economics, November 2018, Con Con, Chile. “New developments in transit design considering peak and off-peak conditions: buses full in the off-peak and the case with two fleets”.
- EMIC Latin America meeting of students in modelling, engineering and sciences, October 2018, Santiago, Chile, “Optimal fleet size, frequencies and vehicles capacities considering peak and off-peak periods in public transport”.
- ITEA Anual Conference and School on Transportation Economics, June 2018, Hong Kong, China. “Optimal fleet size, frequencies and vehicles capacities considering peak and off-peak periods in public transport”.
- Workshop of Transport Economics, November 2017, Con Con, Chile. “Sources of Economies of Scale and Optimal Pricing in Public Transport”.
- ITEA Anual Conference and School on Transportation Economics, June 2017, Barcelona, Spain. “Optimal transit lines structures on a general parametric city: the role of heuristics”.

- Urbanics 3, March 2017, Pucón, Chile. “A parametric description of cities for the normative analysis of transport systems.”
- Chilean 6th Urban design conference, November 2016, Valparaíso, Chile. “Proposal of an urban model for the design of public transport”.

Other academic-related activities

- Chair of the organisation committee of the 2024 TRANSW Symposium.
- Main Guest Editor of the Special Issue “The economics of platform-based mobility and logistics services” in Transportation Research Part C: Emerging Technologies (2024-2025).
- Member of the Editorial Board of the Journal of Public Transportation (Q1) and Transport, Mobility & Society (Latin American open access journal).
- Chilean Conference on Transportation Engineering 2021, Online (due to COVID-19). Organised and presented in the special session “Working as a driver/rider in online transportation apps”.
- Currently organiser of the Seminar Series of TransportLab and the School of Civil Engineering, University of Sydney.
- Regular reviewer for several Journals and Conferences, including: Nature Communications, Nature Cities, Transportation Research Part A, Transportation Research Part B, Transportation Research Part C, Transportation Research Part D, Operations Research, Journal of Public Economics, IEEE Transactions on Intelligent Transportation Systems, Transportation, Journal of Transport Economics and Policy, Transportmetrica A, Transportmetrica B, Journal of Advanced Transportation, IPCO Conference, Annals of the American Association of Geographers, among others.
- Participation in the Ph.D. graduation committee of Bin Chi (UNSW, 2025), and Maximilian Kronmueller (TU Delft, 2024).
- Participation in the M.Sc. defence committee of Macarena Villalobos (U. de Chile, 2018), Esteban Muñoz-Paulsen (U. de Chile, 2019), and Timo van Frankenhuyzen (TU Delft, 2022).
- Organized the special session “On-demand services and public transport networks – the prospects of synergy”. (Video of the presentation available here). Scientific Conference *Reinventing the City*, at the Amsterdam Institute for Advanced Metropolitan Solutions, February 2022.
- Participation in the Ph.D. candidacy defence committee of Raul Ramos (U. Católica de Chile, 2021).
- Published articles in the official magazine of Universidad de Chile.

- Participation in discussion about transportation in the Chilean Parliament, radios, TV and newspapers, and in Australian and German scientific magazines.

Other non-academic activities

- President of Federación de Estudiantes de Universidad de Chile (2013).
- Spokesman of Confederación de Estudiantes de Chile (2013).
- President of Centro de Estudiantes de Ingenería, Universidad de Chile (2011).
- Written articles for Le Monde Diplomatique and other published and online newspapers.
- Participation in panels about youth and politics in Universidad Iberoamericana de Puebla, Mexico and in Bogotá, Colombia (2013).
- Participation in "Expert consultation on the rights to freedom of peaceful assembly and of association of groups most at risk", Office of the High Commissioner for Human Rights, United Nations, Geneva, Switzerland (2013).

Chapters in books of general interest

- The Emergence of Youth in Criticism and Power Building: the chilean experience, in Soto, O., & Sánchez Díaz de Rivera, M., (2017) The power today. México DF, México. Editorial Universidad Iberoamericana. ISBN: 978-607-7901-68-6.
- Struggle for rights is to defend democracy, in Le Monde Diplomatique (2016), Another politics is posible: searching for alternatives. (Otra política es posible: buscando alternativas). Santiago, Chile. Editorial Aún Creemos en los Sueños.
- The challenges for a new cycle of struggle in Le Monde Diplomatique (2013). Alternatives (Social movements, political fights). (Alternativas: movimientos sociales, luchas políticas). Santiago, Chile. Editorial Aún Creemos en los Sueños.

Relevant skills

- Languages: Spanish (native), English (fluent), German (basic), French (basic).
- Computational skills: Matlab (advanced), Latex (advanced), QGIS (basic).

Complete list of peer-reviewed scientific publications

A. Journal Papers (Chronological order)

1. Fielbaum, A. (2025). Coordination Costs in Spatial Matching: Assigned vs Onsite Transport Modes. Transportation Research Part A: Policy and Practice, 199, 104556.
2. Pellegrini, A., & Fielbaum, A. (2025). Are users ready to accept fully flexible walking in on-demand mobility?. Transportation Research Part C: Emerging Technologies, 178, 105210.
3. Fielbaum, A., Salas, D., Zhang, R., & Castro, F. (2025). Idle wage as a tool to regulate the relationship between ride-hailing platforms and drivers. Transportation Research Part C: Emerging Technologies, 174, 105113.
4. Zhang, K., Alonso-Mora, J., & Fielbaum, A. (2025). What do walking and e-hailing bring to scale economies in on-demand mobility?. Transportation Research Part B: Methodological, 192, 103156.
5. Fielbaum, A., Tirachini, A., & Alonso-Mora, J. (2024). Improving public transportation via line-based integration of on-demand ridepooling. Transportation Research Part A: Policy and Practice, 190, 104289.
6. Fielbaum, A., & Pudane, B. (2024). Are shared automated vehicles good for public- or private-transport-oriented cities (or neither)? Transportation Research Part D: Transport and Environment, 104373.
7. Fielbaum, A., Jara-Díaz, S. & Alonso-Mora, J (2024). Beyond the last mile: different spatial strategies to integrate on-demand services into public transport in a simplified city. Public Transport. https://doi.org/10.1007/s12469-023-00348-1
8. Shaer, A., Fielbaum, A., & Levinson, D. (2024). Choosing to drive from alcohol serving establishments (ASEs). Traffic Injury and Prevention.
9. Fielbaum, A., and Alonso-Mora, J. (2024) Design of mixed fixed-flexible bus public transport networks by tracking the paths of on-demand vehicles. Transportation Research Part C: Emerging Technologies. 104580.
10. Fielbaum, A. (2024). On the relationship between free public transport, stop spacing, and optimal frequencies. Transportation Research Part B 183, 102924.
11. Kronmueller, M., Fielbaum, A., & Alonso-Mora, J. (2024). Reducing the Minimal Fleet Size by Delaying Individual Tasks. IEEE Transactions on Intelligent Transportation Systems, doi: 10.1109/TITS.2024.3368101.
12. Kronmüller, M., Fielbaum, A. & Alonso-Mora, J. (2023) Online flash delivery from multiple depots, Transportation Letters, DOI: 10.1080/19427867.2023.2278859
13. Correa, J., Cristi, A., Fielbaum, A., Weinberg, M., & Pollner, T (2023). Optimal item pricing in online combinatorial auctions. Math. Programming . https://doi.org/10.1007/s10107-023-02027-2
14. Fielbaum, A., Tirachini, A., & Alonso-Mora, J. (2023). Economies and diseconomies of scale in on-demand ridepooling systems. Economics of Transportation, 34, 100313.
15. Fielbaum, A., Morales, I. & Verschae, J. (2022). A Water-Filling Primal-Dual Algorithm for Approximating Non-Linear Covering Problems. SIAM Journal on Discrete Mathematics, 36(4), 2889-2915.
16. Fielbaum, A., Ruiz, F., Boccardo, G., Rubio, D., Tirachini, A., & Rosales-Salas, J. (2022). The job of public transport, ride-hailing and delivery drivers: conditions during the COVID-19 pandemic and implications for a post-pandemic future. Travel Behaviour and Society, doi.org/10.1016/j.tbs.2022.11.004.
17. Bai, X., Fielbaum, A., Kronmueller, M., Knoedler, L., and Alonso-Mora, J. (2022). Group-based Distributed Auction Algorithms for Multi-Robot Task Assignment. IEEE Transactions on Automation Science and Engineering. DOI: 10.1109/TASE.2022.3175040.

18. Fielbaum, A., Kucharski, R., Cats, O., Alonso-Mora, J. (2022). How to split the costs and charge the travellers sharing a ride? Aligning system's optimum with users' equilibrium. European Journal of Operational Research 301(3), 956-973. https://doi.org/10.1016/j.ejor.2021.11.041.
19. Fielbaum, A., Kronmueller, M. & Alonso-Mora, J. (2022). Anticipatory routing methods for an on-demand ridepooling mobility system. Transportation 49, 1921-1962.
20. Fielbaum, A. (2021). Optimizing a vehicle's route in an on-demand ridesharing system in which users might walk. Journal of Intelligent Transportation Systems: Technology, Planning and Operation 26(4), 432-447.
21. Fielbaum, A., Bai, X., & Alonso-Mora, J. (2021). On-demand ridesharing with optimized pick-up and drop-off walking locations. Transportation Research Part C: Emerging Technologies, 126, 103061.
22. Fielbaum, A., & Jara-Díaz, S. (2021). Assessment of the socio-spatial effects of urban transport investment using Google Maps API. Journal of Transport Geography, 91, 102993.
23. Kucharski, R., Fielbaum, A., Alonso-Mora, J., & Cats, O. (2021). If you are late, everyone is late: late passenger arrival and ride-pooling systems' performance. Transportmetrica A: Transport Science, 17(4), 1077-1100.
24. Fielbaum, A., & Tirachini, A. (2021). The sharing economy and the job market: the case of ride-hailing drivers in Chile. Transportation, 48(5), 2235-2261.
25. Fielbaum, A., & Alonso-Mora, J. (2020). Unreliability in ridesharing systems: Measuring changes in users' times due to new requests. Transportation Research Part C: Emerging Technologies, 121, 102831.
26. Fielbaum, A., Jara-Diaz, S., & Gschwender, A. (2020). Lines spacing and scale economies in the strategic design of transit systems in a parametric city. Research in Transportation Economics, 100991.
27. Jara-Díaz, S., Fielbaum, A., & Gschwender, A. (2020). Strategies for transit fleet design considering peak and off-peak periods using the single-line model. Transportation Research Part B: Methodological, 142, 1-18.
28. Fielbaum, A., Jara-Diaz, S., & Gschwender, A. (2020). Beyond the Mohring effect: Scale economies induced by transit lines structures design. Economics of Transportation, 22, 100163.
29. Fielbaum, A. (2020). Strategic Public Transport Design Using Autonomous Vehicles and Other New Technologies. International Journal of Intelligent Transportation Systems Research 18, 193-201.
30. Fielbaum, A., Jara-Díaz, S., & Gschwender, A. (2018). Transit line structures in a general parametric city: The role of heuristics. Transportation Science, 52(5), 1092-1105.
31. Jara-Díaz, S., Fielbaum, A., & Gschwender, A. (2017). Optimal fleet size, frequencies and vehicle capacities considering peak and off-peak periods in public transport. Transportation Research Part A: Policy and Practice, 106, 65-74.
32. Fielbaum, A., Jara-Diaz, S., & Gschwender, A. (2016). Optimal public transport networks for a general urban structure. Transportation Research Part B: Methodological, 94, 298-313.
33. Fielbaum, A., Jara-Diaz, S., & Gschwender, A. (2017). A parametric description of cities for the normative analysis of transport systems. Networks and Spatial Economics, 17(2), 343-365.

B. Conference Papers (Chronological order)

1. Awad, M. & Fielbaum, A. (2025). Analysis of commuter mode choice with and without real-time Park-and-Ride information. In 46th Australian Transport Research Forum.
2. Theodoridis, N., Fielbaum, A., Alonso-Mora, J. & Atasoy, B. (2024). Quantifying the benefits of short-term reservations in on-demand ridepooling. In 44th Australian Transport Research Forum.

3. Kronmueller, M., Fielbaum, A., & Alonso-Mora, J. (2022). Routing of Heterogeneous Fleets for Flash Deliveries via Vehicle Group Assignment. In 2022 IEEE 25th International Conference on Intelligent Transportation Systems (ITSC) (pp. 2286-2291). IEEE.
4. Correa, J., Cristi, A., Fielbaum, A., Pollner, T., & Weinberg, S. M. (2022). Optimal Item Pricing in Online Combinatorial Auctions. In International Conference on Integer Programming and Combinatorial Optimization (pp. 126-139). Springer, Cham.
5. M. Kronmueller, A. Fielbaum and J. Alonso-Mora (2021). On-Demand Grocery Delivery From Multiple Local Stores With Autonomous Robots. 2021 International Symposium on Multi-Robot and Multi-Agent Systems (MRS),29-37, doi: 10.1109/MRS50823.2021.9620599.
6. P. Schuller, A. Fielbaum and J. Alonso-Mora (2021). Towards a geographically even level of service in on-demand ridepooling. 2021 IEEE International Intelligent Transportation Systems Conference (ITSC), 2429-2434, doi: 10.1109/ITSC48978.2021.9564910.
7. Fielbaum, A., Morales, I. & Verschae, J. (2020). A Water-Filling Primal-Dual Algorithm for Approximating Non-Linear Covering Problems. Proceedings of The 47th International Colloquium on Automata, Languages and Programming (ICALP 2020).