

PERSONAL INFORMATION



# Josep Ma Salanova Grau

Thessaloniki, Greece Sex Male | Date of birth 01/11/83 | Nationality Spanish

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Transportation engineer with 15 years of experience in EU-funded research & innovation projects; senior researcher with analytical and data science skills; development and implementation of mobility solutions for passenger and freight transport; strong background and expertise in transport and data modelling and analytics, ITS and c-ITS, on-demand and sharing transport. Responsible for the data analysis and modelling laboratory of the Thessaloniki Smart Mobility Living Lab, which is an effective member of the European Network of Living Labs (ENOLL). Council member of ENOLL, leader of the working group on mobility at ENOLL and co-leader of the joint working group on living labs enabling Zero Pollution goals between the EC and ENOLL. Supporter of "Red SIMUS" in the creation of a network of mobility living labs in Latin America.

### **CURRENT POSITION**

Head of the Data analysis and Modelling laboratory of CERTH-HIT.

WORK EXPERIENCE

01.2022 - Today Asso

Associate Researcher at CERTH-HIT (Researcher Grade B')

Centre for Research and Technology Hellas - Hellenic Institute of Transport (Greece)

05.2018 – 12.2021 Associate Researcher at CERTH-HIT (Researcher Grade C')

Centre for Research and Technology Hellas - Hellenic Institute of Transport (Greece)

01.2008 - 04.2018 Research Associate at CERTH-HIT

Centre for Research and Technology Hellas - Hellenic Institute of Transport (Greece)

2007 Research associate at CENIT - UPC

Center for innovation in Transport- Polytechnic University of Catalonia (Spain)

**EDUCATION AND TRAINING** 

2010 - 2013

# Ph. D. Civil engineering - Transport engineering

School of Civil Engineering of Barcelona, Polytechnic University of Catalonia

• Thesis title: Modelling of taxi services in urban environment

2008 - 2009

# M.Sc. Design, Organization and Management of Transportation Systems

Aristotle's University of Thessaloniki (AUTh)

 Thesis title: Advanced mathematical programming methods for the computation of user equilibrium in urban road networks

2001 - 2007

### Civil engineering degree

School of Civil Engineering of Barcelona - Polytechnic University of Catalonia

Thesis title: Criteria for the Localization of Distribution and Consolidation Terminals (Hubs)

OTHER EXPERIENCE

2016 - 2017

### 10 Course Certification track at coursera.org (Johns Hopkins University)

Data Science Specialization

2016- today

### Mentoring at various events

LINDEDCTANDING

- Innovation weekend for Public Transport. Thessaloniki (September 2018)
- Digital Transportation Academy Startify7 start-up summer school. Thessaloniki (July 2016)
- Mobility Innovations for a New Dawn in Sustainable European Transport Systems (October 2015)

PERSONAL SKILLS

Mother tongue(s)

Spanish and Catalan

Other language(s)

UNDERSTANDING		SPEAKING		WRITING
Listening	Reading	Spoken interaction	Spoken production	
C1	C1	C1	C1	C1
C1	C1	C1	C1	C1
A2	A2	A2	A2	A2

English (TOEFL 250/300) Greek

French

Computer skills

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Microsoft Office, MATLAB, ESRI ArcGIS, PTV VISSIM & PTV VISUM, R



### ADDITIONAL INFORMATION

### Projects relevant to the topic

- "KOMVOS: Infrastructures for the support of transport research. HIT-Portal for management and processing of transport data". General Secretariat for Research and Technology. 2005-2009.
- "MOBINET: Mobility Centre Network". Intelligent Energy Europe Agency, IEE. 2007-2011.
- "FREILOT: Urban freight energy efficiency pilot", European Commission, CIP programme. 2009-2012.
- "EOX: Intelligent Urban Mobility Management System for Thessaloniki". European Economic Area Grants. 2009-2012.
- "Traffic Prognosis: Development of traffic surveillance tool for congestion management on road networks". General Secretariat for Research and Technology. 2012-2013.
- "EasyTrip: Greece-Bulgaria e-mobility solutions". European Commission, INTERREG Greece-Bulgaria 2011. 2012-2014.
- "SEE-ITS: Intelligent Transport Systems in South East Europe". European Commission, South East Europe 2012 programme. 2012-2014.
- "COMPASS4D: Cooperative Mobility Pilot on Safety and Sustainability Services for Deployment". European Commission, CIP PSP 2012. 2013-2015.
- "COGISTICS: Cooperative logistics for sustainable mobility of goods". European Commission, CIP PSP 2013. 2014-2016.
- "URBANETS: Sustainable Management of Urban Networks with the Use of ICT". European Territorial Cooperation Programme Greece
  Italy 2007 2013. 2014.
- Big Data Europe: Thessaloniki was the transport pilot of the project, providing both the data and the algorithms for building mobility services based on big data. 2015-2017.
- Big Data Warehouse for Mobility (BD W4M). Project funded by GRNET for using its research infrastructure. 2015-2016.
- SAFER-LC: Level Crossing by integrating and optimizing road-rail infrastructure management and design. 2017-2020. H2020
- GALILEO 4 Mobility: Fostering the adoption of GALILEO for Mobility as a Service. H2020.
- IRIS: Integrated and Replicable Solutions for Co-Creation in Sustainable Cities. 2017-2020. H2020.
- Ibikeshare: Development of an integrated electronic service to support the operation of public bicycle systems, NSRF (National Strategic Reference Framework).
- SHOW: SHared automation Operating models for Worldwide adoption. 2020-2023. H2020.
- commINSAFE: CommutINg with ShAred mobility covid-FrEe. 2021. EIT-UM.
- multiDepaRT: A multi-operator tool for managing Demand rEsPonsive transport. 2021. EIT-UM.
- Smart Traffic Management System Integration of Traffic Control Centers, Region of Central Macedonia. 2020-2021.
- Cleanergy: Cable-LEss ANd renewable energy docks for e-scooters. 2022. EIT-UM.
- RideSafeUM: Advanced active safety solutions for micro-mobility vehicles. 2022. EIT-UM.

### Relevant publications in scientific journals

- G. Giannopoulos, E. Mitsakis, J.M. Salanova (2012) Overview of Intelligent Transport Systems (ITS) developments in and across transport modes. JRC Scientific and Policy Reports.
- Jesus Gonzalez Feliu, Joëlle Morana, Josep Maria Salanova Grau, Tai-yu Ma (2013) "Design and scenario assessment for collaborative logistics and freight transport systems" International Journal of Transport Economics Vol. XL, No. 2, pp 207-240.
- E. Mitsakis, I. Stamos, J.M. Salanova Grau, E. Chrysohoou, G. Aifadopoulou (2013) Urban Mobility Indicators for Thessaloniki, Journal of Traffic and Logistics Engineering (JTLE) (ISSN: 2301-3680), Vol. 1 No. 2, June 2013. pp. 148-152.
- Jesus Gonzalez-Feliu, Josep-Maria Salanova Grau & Adrien Beziat (2014) A location-based accessibility analysis to estimate the suitability of urban consolidation facilities, International Journal of Urban Sciences, 18:2, 166-185.
- E. Mitsakis, J.M. Salanova Grau, E. Chrysohoou, I. Stamos, G. Aifadopoulou, (2014) Multi-criteria route choice in road networks, International Journal of Information and Decision Sciences (IJIDS), Vol. 7, No. 1, 2015 pp. 3-17.
- Mitsakis E., Salanova J. M., Chrysohoou E., Aifadopoulou G. (2015). A robust method for real time estimation of travel times for dense urban road networks using point-to-point detectors. Transport 30(3) 2015, pp. 264-272. Special Issue on Smart and Sustainable Transport.
- Cuevas V., Estrada M., Salanova J. M. (2016). Management of on-demand transport services at a urban context. Barcelona case study. Transportation Research Procedia. Vol 13, pp 155-165.
- Mitsakis E., Chrysohoou E., Salanova J. M., Iordanopoulos P., Aifadopoulou G. (2017). The sensor location problem: methodological approach and application. Transport 31(4) pp. 1-7.
- Salanova Grau, J.M., Estrada, M. (2017), Social optimal shifts and fares for the Barcelona taxi sector, Transport Policy, volume 76, April 2019, pages 111-122.
- Salanova J. M., Toumbalidis J., Chaniotakis E., Karanikolas N., Aifadopoulou G. (2017). Correlation between digital and physical world, case study in Thessaloniki. Journal of Location Based Services. Vol 11, No. 2, pp 118-132. [DOI: 10.1080/17489725.2017.1420257]
- Salanova Grau J. M., Mitsakis E., Tzenos P., Stamos I., Aifadopoulou G. (2018). Multi-source data framework for network traffic state estimation and prediction. Journal of Advanced Transportation. vol. 2018, Article ID 9078547, 9 pages, 2018.
- Salanova J. M., Estrada M., (2018). Modeling and comparison of taxi operational modes: case study in Barcelona. Transportation Research Procedia. Vol 33, pp 59-66.



- Gonzalez-Feliu J., Pronello C., Salanova J. M. (2018). Multi-stakeholder collaboration in urban transport: state-of-the-art and research opportunities. Transport 33(4) 2018, pp. 1079-1094. Special Issue on Collaboration and Urban Transport.
- Bratsas Ch., Koupidis K., Salanova Grau, J.M., Giannakopoulos K., Kaloudis A., Alfadopoulou G. (2019). A Comparison of Machine Learning Methods for the Prediction of Traffic Speed in Urban Places. MDPI Sustainability, Special Issue "Sustainable and Intelligent Transportation Systems", Sustainability 2020, Volume 12, Issue 1, 142.
- Boufidis N., Salanova J.M, Tzenos P., Aifandopoulou G. (2020). Estimating Time of Arrival of Trains at Level Crossings for the Provision of Multimodal Cooperative Services. Transportation Research Procedia, Vol 47, pp 346-352. DOI: 10.1016/j.trpro.2020.03.108.
- Skoufas, Anastasios & Basbas, Socrates & Grau, Josep & Aifadopoulou, Georgia. (2020). Analysis of In-Vehicle Warning System for Rail-Road Level Crossings: Case Study in the City of Thessaloniki, Greece. Periodica Polytechnica Transportation Engineering.
- Aifadopoulou, G., Tsaples, G., Salanova, J., Mallidis, I., and Sarianidis, N. (2020). Management of resource allocation on vehicle-sharing schemes: the case of Thessaloniki's bike-sharing system. *Oper Res Int J* (2020).
- Miquel Estrada, Josep Maria Salanova, Marcos Medina-Tapia & Francesc Robusté (2021) Operational cost and user performance analysis of on-demand bus and taxi systems, Transportation Letters, 13:3, 229-242.
- Nikiforiadis A, Aifadopoulou G., Salanova J.M., Boufidis N., (2021). Determining the optimal locations for bike-sharing stations: methodological approach and application in the city of Thessaloniki, Greece. Transportation Research Procedia, Vol 52, pp 557-564.
- Stamos I., Mitsakis E., Salanova J. M., Morfoulaki M, Kotoula N. (2021). A model and expert-opinion-based approach for the selection and assessment of pedestrian areas in urban environments. International Journal of Information and Decision Sciences. Vol. 13, No. 4, 2021, 381-393.
- Myrovali G., Salanova J. M., Goutzikas T., Savvas A. (2021). Low Data Intensive Models For Supporting Taxi Policy Making: case Study in Cyprus. International Journal of Information and Decision Sciences. Vol. 13, No. 4, 2021, 394-418.
- Salanova J.M., Konstantinidou M., Boufidis N., Aifadopoulou G. Estimation of value-of-time and a comparison of an ex ante and an ex post willingness to pay for shared transport services in Thessaloniki. Research in Transportation Economics, 2021.

#### **Book chapters**

- Gonzalez-Feliu J., Salanova J. M., Morana J., Mitsakis E., (2013) Urban logistics pooling viability analysis via a multicriteria multiactor method. La nueva ordenacion del Mercado de transporte. Marcial Pons, pp. 867-882, 2013.
- Mitsakis E., Salanova J.M., Stamos I., Chaniotakis E. (2016) Network Criticality and Network Complexity Indicators for the Assessment of Critical Infrastructures During Disasters. In: Kotsireas I., Nagurney A., Pardalos P. (eds) Dynamics of Disasters—Key Concepts, Models, Algorithms, and Insights. DOD 2015 2016. Springer Proceedings in Mathematics & Statistics, vol 185. Springer, Cham
- E. Chalkia, J.M. Salanova, E. Bekiaris, G. Ayfandopoulou, C. Ferarini, E. Mitsakis (2016). Routing algorithms for the safe transportation of pupils to school using school buses, J. Wiley/ISTE, Traffic Safety, chapter 18, pp. 283-299.
- Mitsakis E., Salanova Grau J.M., Iordanopoulos P., Mintsis E. (2016). Frameworks and Methods for ITS Evaluation. Evaluation of Intelligent Road Transportation Systems: Methods and Results. IET Digital Library.
- Salanova J. M., Maciejewski M., Bischoff J., Estrada M., Tzenos P., Stamos I. (2017). Use of probe data generated by taxis. Big Data for regional science. Routledge Advances in Regional Economics, Science and Policy. Taylor & Francis Group.
- Aifandopoulou G., Salanova J. M., Tzenos P., I. Stamos, E. Mitsakis (2018). Big and open data supporting sustainable mobility in smart cities the case of Thessaloniki. Data Analytics: Paving the Way to Sustainable Urban Mobility. Chapter No: 47.
- Stamos I., Salanova Grau J.M., Chaniotakis E., Tsaples G., Mitsakis E. (2019). Assessment of C-ITS network performance scalability and transferability. Cooperative Intelligent Transport Systems: Towards high-level automated driving, 2019. IET Digital Library.
- Skoufas A., Boufidis N., Salanova Grau J.M., Ayfantopoulou G., Basbas S. (2021) Ex-Post Evaluation of an In-Vehicle Warning System for Rail-Road Level Crossings: The Case of Taxi Drivers. In: Nathanail E.G., Adamos G., Karakikes I. (eds) Advances in Mobility-as-a-Service Systems. CSUM 2020. Advances in Intelligent Systems and Computing, vol 1278. Springer, Cham.
- Ayfantopoulou G., Konstantinidou M.N., Boufidis N., Salanova Grau J.M. (2021) Evaluation of a Ride-Sharing Service in Thessaloniki: The Perspective of Both the Service Provider and the Users. In: Nathanail E.G., Adamos G., Karakikes I. (eds) Advances in Mobility-as-a-Service Systems. CSUM 2020. Advances in Intelligent Systems and Computing, vol 1278. Springer, Cham.
- Burrieza J., Rodríguez R., Cantú O., Aifadopoulou G., Salanova J.M., Konstantinidou M., Frederix R. and Pápics P. (2021). Future Scenarios for Mobility Innovations and Their Impacts in Cities and Transport Models. In: Nathanail E.G., Adamos G., Karakikes I. (eds) Advances in Mobility-as-a-Service Systems. CSUM 2020. Advances in Intelligent Systems and Computing, vol 1278. Springer, Cham.
- Ayfantopoulou G., Konstantinidou M.N., Chatziathanasiou M., Salanova Grau J.M. (2021) Integrating Modelling in Urban Policy Cycle and Decision Making. In: Nathanail E.G., Adamos G., Karakikes I. (eds) Advances in Mobility-as-a-Service Systems. CSUM 2020. Advances in Intelligent Systems and Computing, vol 1278. Springer, Cham. https://doi.org/10.1007/978-3-030-61075-3\_110
- Aifadopoulou G., Burrieza J., Masegosa A., Salanova J.M., Boufidis N., Martínez I.M., Fernandez-Muga P. and Cantú O. (2021). Cataloging and Assessing City-scale Mobility Data. In: Nathanail E.G., Adamos G., Karakikes I. (eds) Advances in Mobility-as-a-Service Systems. CSUM 2020. Advances in Intelligent Systems and Computing, vol 1278. Springer, Cham. https://doi.org/10.1007/978-3-030-61075-3\_109

Publications in reviewed conference proceedings: 166

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