CURRICULUM VITAE

Dr Jacek Pawlak

Nationality: Polish, British
Contact details
Phone (office): +44 (0) 20 7594 6086
E-mail: jacek.pawlak@imperial.ac.uk
Web: www.imperial.ac.uk/people/jacek.pawlak
LinkedIn: www.linkedin.com/in/jacek-pawlak

Correspondence Address:
Room 602, Centre for Transport Studies
Department of Civil and Environmental
Engineering, Skempton Building,
South Kensington Campus
Imperial College London
London SW7 2AZ, United Kingdom

Summary

Dr Jacek Pawlak is an experienced specialist working in the fields of transport, urban systems, technology, and innovation. His background is in Economics, Geography and Transport Studies (Imperial College London and University College London). He currently holds the post of Research Fellow at Imperial College London (Urban Systems Laboratory and Centre for Transport Studies). Since January 2017 he has been a Committee Research Coordinator for the US Transportation Research Board Standing Committee on Effects of ICT on Travel choices (ADB20). He is also a Fellow of the Royal Geographical Society. Dr Pawlak also collaborates with Cisco Corporate & Strategic Innovation Group across EMEAR as a Principal Modelling Specialist. He also founded and is the Director of a consultancy company Intersection Analytics Ltd.

In recent years, Dr Pawlak has been involved in research and consultancy work concerning understanding and modelling the role and impact of new technologies on transport and more broadly urban systems, using traditional and emerging data sources. To date, Dr Pawlak has been part of a number of large scale academic, industrial research and consultancy projects, including £7M EPSRC-funded IDLES project and £6M EPSRC-funded Digital City Exchange project at Imperial College London, £2M InnovateUK-RSSB-funded Project SWIFT (Superfast Wi-Fi In-Train for Future Travel). H was also involved in formulating and executing the £15M the UK's IoT City Demonstrator Cityverve. In addition, Dr Pawlak has extensive experience as a reviewer for academic journals and research agencies (UK and beyond) as well as an advisor to government departments and industrial bodies, including the Department for Transport, the Department of Culture, Media and Sport and National Infrastructure Commission.

Areas of expertise	• Transport demand and travel behaviour modelling • Interactions between transport demand and Information and Communication Technologies (ICT), including mobile and on-board ICT; • Agent-based modelling and simulations; • Time use and productivity analysis, • Willingness-to-pay and time savings valuation; • Quantitative methods for data analysis, including data fusion and imputation.
Professional: Academic	• **Centre for Transport Studies & Urban Systems Laboratory, Imperial College London: Research Fellow** – London, United Kingdom, December 2017-present; • **London Interdisciplinary Social Science Doctoral Training Partnership (LISS DTP): Chief Strategy Officer** – London, United Kingdom, March 2018-December 2019; • **Centre for Transport Studies & Urban Systems Laboratory, Imperial College London: Postdoctoral Research Associate** – London, United Kingdom, August 2014-December 2017; • **Centre for Transport Studies and Digital Economy Centre, Imperial College London: Doctoral Student** – Topic: Modelling the relationships between ICT and travel behaviour, London, United Kingdom, 2010-2014;
Consulting	• **Intersection Analytics Ltd.: Director** – Consultancy services for transport and IT industries, EMEAR, August 2015-present; • **Cisco Systems: Principal Modelling Specialist** – Consultant for Cisco innovation activities across EMEAR, March 2014-now;

	• **Rail Safety and Standards Board (RSSB)** – External advisory board member for project T1204 Economic benefits of having a rail connected corridor – London, United Kingdom, March 2020-now; • **Highways England Expressways Design Vision** – Smart Roads Advisory Panel: Member – London, United Kingdom, June 2017-September 2018; • **Imperial College Consultants & SYSTRA Ltd: Consultant** – Review of the Value of Time study for the UK Department for Transport, London, United Kingdom, 2015.
Other	• **London Interdisciplinary Social Science Doctoral Training Partnership (LISS DTP): Chief Strategy Officer** – London, United Kingdom, March 2018-December 2019; • **Department of Civil and Environmental Engineering, Imperial College London: PhD Student Representative (Transport)** – elected by the PhD students for 2012/2013 academic year, London, United Kingdom, 2012-2013; • **University College London: First Year Students' Mentor** – Student Transition Programme, London, United Kingdom, 2007-2009.
Education	• **Centre for Transport Studies and Digital Economy Centre, Imperial College London** – PhD, Thesis: Modelling the relationships between ICT and travel behaviour, London, United Kingdom, 2010-2014; • **Imperial College London, University College London** – MSc, DIC, Intercollegiate MSc in Transport, London, United Kingdom, 2009-2010; • **University College London** – BSc(Econ) Economics and Geography, 1st Class Honours, London, United Kingdom, 2006-2009; • **International Baccalaureate Diploma, IB School No.1002** – Diploma awarded with 42/45 points, Poznań, Poland, 2003-2006.
Scholarships	• **PhD studentship from the UK Engineering and Physical Science Research Council (EPSRC)** – Centre for Transport Studies and Digital Economy Centre, Imperial College London, London, United Kingdom, 2010-2014; • **The Prime Minister's Scholarship for the Best High School Students** – awarded for the school year 2005/2006, Poznań, Poland, 2005-2006.
Memberships	• **Transportation Research Board of the National Academies (USA) Standing Committee of Impact of ICT on Travel Choices (AEP35):** Committee Research Coordinator & Member – 2017-present; • **NECTAR: Network on European Communications and Transport Activities Research** – 2016-present; • **Royal Geographical Society (with the Institute of British Geographers):** Fellow – 2012-present; • **International Association for Travel Behaviour Research:** Member – 2012-present; • **Transport Modellers Forum:** Member – 2012-present.
Prizes and nominations	• **President's Awards for Excellence in Education: Assistant Supervisor:** Nominated by the Civil & Environmental Engineering Department – Imperial College London, United Kingdom, 2019. • **Student Academic Choice Award (SACA):** Nominated for the Best Tutor Award – Imperial College Students Union, London, United Kingdom, 2015; • **The Smeed Prize Runner-Up for the Best Student Paper** – UK Universities' Transport Study Group (UTSG), 46th UTSG Conference, January 2014, Newcastle, United Kingdom.

Peer reviewer	• Journal:
	    o Cities
	    o Transportation Research Part A: Policy and Practice
	    o Transportation Research Part B: Methodological
	    o Transportation Research Part C: Emerging Technologies

o Transportation Research Part E: Logistics and Transportation Review
o Transportmetrica A: Transport Science
o Journal of Transport Geography
o Transportation
o Transportation Research Record
o Travel Behaviour and Society
o International Journal of Urban Sciences
o International Journal of Entrepreneurship and Innovation Management
o European Journal of Transport and Infrastructure Research

- Conferences:

o The Annual Meeting of the Transportation Research Board Part (TRB)
o International Association for Travel Behaviour Research (IATBR) Conference
o World Conference of Transport Research Society (WCTRS) Conference
o International Choice Modelling Conference (ICMC)
o Royal Geographical Society with Institute of British Geographers Annual International Conference

Invited presentations	- **'A microeconomic framework for integrated modelling of emerging activity-travel behaviour patterns and energy consumption'** – invited seminar given at the Energy Futures Lab, Imperial College London, London, 10 October 2019. (See the associated blog post). - **'From the Quantity to Be Minimised to a Valuable Resource: Modelling Travel Time Use Choices and Their Implications in the Era of Mobile ICT and Digital Activities'** – invited seminar given at the Choice Modelling Centre, University of Leeds, Leeds, 26 April 2018. - **'IoT Technologies for Healthy Cities'** – invited presentation given to the conference Healthy Urban Futures, Barcelona, 05 October 2017. - **'Information and Communications Technologies and Travel Behaviour: 30 Years of an Uneasy Relationship'** – invited presentation given to the Transport Statistics User Group (TSUG), 18 May 2016. - **'Wireless Communications on Trains: Opportunities and Challenges of Today and Tomorrow'** – keynote presentation at 'Gigabit Train' workshop organised by techUK, UK's IT industry association, 21 March 2016.
Teaching	- **Transport Demand and its Modelling (CIVE 97120)** – Graduate (MSc) in Transport Programme, course co-conveyor, Imperial College London, London United Kingdom; - **MSc Dissertation Supervision** – Graduate (MSc) in Transport Programme, dissertation (Special Project) co-supervision, Imperial College London, London United Kingdom.
PhD student supervision	- **Heather Hou,** October 2018-present. Topic: A Novel Approach to Optimising HVAC Operations Based on Human Indoor Behaviour Prediction. Funding: China Scholarship Council. Jointly with Dr Aruna Sivakumar; - **Alessandra Abeille**, October 2017-present. Topic: An interdisciplinary framework for disaggregate assessment of productivity and well-being impacts of digital technologies on knowledge workers in non-traditional settings. Funding: London Interdisciplinary Social Science Doctoral Training Partnership & Economic and Social Research Council. Jointly with Dr Aruna Sivakumar. - **Yuanying Zhao** October 2016-present. Topic: Inverse Discrete Choice Models (IDCM): A novel approach to enriching geotagged big data. Jointly with Dr Aruna Sivakumar.

Publications:

Journal	**(J9)** Pawlak, J., G. Circella, H.S. Mahmassani, P.L. Mokhtarian (2020) 'Information and Communication Technologies (ICT), Activity Decisions, and Travel Choices: 20 years into the Second Millennium and where do

we go next?'. *TRB: Planning and Environment Centennial Papers* http://onlinepubs.trb.org/onlinepubs/centennial/papers/ADB20-Final.pdf.

(J8) Pawlak, J., A.F. Imani and A. Sivakumar (2020) 'A microeconomic framework for integrated agent-based modelling of activity-travel patterns and energy consumption'. *Procedia Computer Science*, Vol.170, pp.785-790, https://doi.org/10.1016/j.procs.2020.03.155.

(J7) Pawlak, J. (2020) 'Travel-based multitasking: review of the role of digital activities and connectivity'. *Transport Reviews: A Transnational Transdisciplinary Journal*, https://doi.org/10.1080/01441647.2020.1728418.

(J6) Psyllou, E., J. Pawlak (2019) 'Congestion, safety, economic and environmental challenges of vehicle automation in transport system. Comments on "Driverless cars will make passenger rails obsolete"'. *IEEE Technologies and Society Magazine*, Vol. 38(2), pp. 28-35. https://doi.org/10.1109/MTS.2019.2913068.

(J5) Zhao, Y., J. Pawlak and J.W. Polak (2018) 'Inverse discrete choice modelling (IDCM): Theoretical and practical considerations for imputing respondent attributes from the patterns of observed choices'. *Transportation Planning and Technology*, Vol. 41, pp. 58-79. http://dx.doi.org/10.1080/03081060.2018.1402745.

(J4) Pawlak, J., J.W. Polak and A. Sivakumar (2017) 'A framework for joint modelling of activity choice, duration, and productivity while travelling'. *Transportation Research Part B: Methodological*, Vol. 106, pp. 153-172. https://doi.org/10.1016/j.trb.2017.10.010.

(J3) Mikołajczak, P., J. Pawlak (2017) 'Factors affecting outcomes of EU-supported investments in innovation among SMEs in the Greater Poland (Wielkopolska) region, Poland'. *Journal of Research in Marketing and Entrepreneurship*, Vol. 19(2), pp. 140-160. https://doi.org/10.1108/JRME-04-2017-0011.

(J2) Bris, M., J. Pawlak and J.W. Polak (2017) 'How is ICT use linked to household transport expenditure? A cross-national macro analysis of home broadband access in 33 countries using instrumental variables'. *Journal of Transport Geography.*, Vol. 60, pp. 231-242, https://dx.doi.org/10.1016/j.jtrangeo.2017.03.012.

(J1) Pawlak, J., J.W. Polak and A. Sivakumar (2015) 'Towards a microeconomic framework for modelling the joint choice of activity–travel behaviour and ICT use'. *Transportation Research Part A: Policy and Practice*, Vol. 76, pp. 92-112, http://dx.doi.org/10.1016/j.tra.2014.10.013.

Book chapters

(B1) Pawlak, J., J.W. Polak and A. Sivakumar (2014) 'Digital Behaviour and Physical Mobility: A Cross-National Analysis'. In Roorda, M. and E. Miller (eds) *Travel Behaviour Research: Current Foundations, Future Prospects.* Toronto: International Association for Travel Behaviour Research.

Reports

(R2) Le Masurier, P., J.W. Polak, J. Pawlak, M. Fosgerau, K. Hjorth (2015) 'Value of Travel Time Savings: Peer Review and Audit'. Reported prepared for the Department for Transport, UK, https://www.gov.uk/government/publications/values-of-travel-time-savings-and-reliability-peer-review-and-audit.

(R1) Pawlak, J., S. Le Vine, J.W Polak, A. Sivakumar, and J. Kopp (2015) 'ICT and Physical Mobility: State of knowledge and Future Outlook'. Munich: Institute for Mobility Research (ifmo), http://www.ifmo.de/publications.html?t=43.

Book reviews **(V1)** Pawlak, J. (2016) 'ICT for Transport: Opportunities and Threats'. Edited by Thomopoulos, N., M. Givoni, and P. Rietveld. Reviewed in Journal of Transport Geography, Vol. 55, pp.191-192, http://dx.doi.org/10.1016/j.jtrangeo.2016.08.006.

Conferences **(C30)** Zhao, Y., J. Pawlak and A. Sivakumar (2020) 'Exploring the link between spatial aggregation of Mobile Network Data and the quality of sociodemographic enrichment using the Inverse Discrete Choice Modelling approach'. 12th International Conference on Transport Survey Methods, 31 May – 5 June, Praia de Porto Novo, Portugal.

(C29) Hou, H., J. Pawlak, A. Sivakumar and B. Howard (2020) 'An urban-system level framework for building occupancy and electricity consumption modelling and simulation'. Building Simulation and Optimization, 9-10 September, Loughborough, United Kingdom.

(C28) Pawlak, J., A.F. Imani and A. Sivakumar (2020) 'A microeconomic framework for integrated agent-based modelling of activity-travel patterns and energy consumption'. 9th International Workshop on Agent-based Mobility, Traffic and Transportation Models, Methodologies and Applications (ABMTRANS), 6-9 April, Warsaw, Poland.

(C27) Abeille, A., J. Pawlak and A. Sivakumar (2019) 'Exploring the meaning and drivers of personal productivity of knowledge workers in mobile settings'. 8th Symposium of the European Association for Research in Transportation (hEART), 4-6 September, Budapest, Hungary.

(C26) Abeille, A., J. Pawlak and A. Sivakumar (2019) 'Exploring the internal and external drivers of knowledge workers' productivity in mobile settings'. International Association for Research in Economic Psychology & Society for the Advancement of Behavioral Economics (IAREP/SABE), 1-4 September, Dublin, Ireland.

(C25) Zhao, Y., J. Pawlak and J.W. Polak (2019) 'Sociodemographic Enrichment of Anonymised Mobile Network Data: Application of the Inverse Discrete Choice Modelling Theory'. 6th International Choice Modelling Conference, 19-21 August, Kobe, Japan.

(C24) Zhao, Y., J. Pawlak and J.W. Polak (2019) 'Enrichment of transport big data: exploring performance of the inverse discrete choice modelling approach using Monte Carlo simulation'. 98th Annual Meeting of Transportation Research Board, 13-17th January, Washington D.C., USA.

(C23) Zhao, Y., J. Pawlak and J.W. Polak (2018) 'Enrichment of transport big data: exploring performance of the inverse discrete choice modelling approach using Monte Carlo simulation'. 7th Symposium of the European Association for Research in Transportation (hEART), 5-7 September, Athens, Greece.

(C22) Abeille, A., J. Pawlak, J.W. Polak and N. Chrissos (2018) 'The genome of an occupation: A task-based approach to modelling travel behaviour and work in mobile settings'. 15th International Conference on Travel Behavior Research (IATBR), 10-15 July, Santa Barbara, CA, USA.

(C21) Pawlak, J., A. Abeille, J.W. Polak, N. Chrissos and Mark O'Mailley (2018) '300 Mbps+ connectivity on train: pre- and post- assessment of travel time use, productivity and ridership implications from a trial implementation in Scotland'. 15th International Conference on Travel Behavior Research (IATBR), 10-15 July, Santa Barbara, CA, USA.

(C20) Pawlak, J. and J.W. Polak (2018) 'Actions speak louder than words: Modelling the relationship between rail passenger satisfaction and productivity and the intended and actual Internet use while travelling'. Modelling Conference, 13-15 June, Cracow, Poland.

(C19) Abeille, A., J. Pawlak, J.W. Polak and N. Chrissos (2018) 'A framework for modelling the role of tasks associated with occupations in determining the propensity to and productivity of work in mobile settings'. 50th Universities' Transport Study Group Conference, 3-5 January, London, United Kingdom.

(C18) Zhao, Y., J. Pawlak and J.W. Polak (2017) 'Privacy-preserving socioeconomic attribute enrichment for mapping of passively-derived OD matrices'. Royal Geographical Society with Institute of British Geographers Annual International Conference, 29 August-1 September, London, United Kingdom.

(C17) Zhao, Y., J. Pawlak and J.W. Polak (2017) 'Inverse Discrete Choice Models (IDCM): Theoretical and Practical Considerations for Imputing Respondent Attributes from the Patterns of Observed Choices'. 49th Universities' Transport Study Group Conference, 4-7 January, Dublin, Ireland.

(C16) Pawlak, J., J.W. Polak, and A. Sivakumar, (2017) 'A framework for joint modelling of travel time use and its productivity'. 96th Annual Meeting of Transportation Research Board, 8-12 January, Washington D.C., USA.

(C15) Pawlak, J. and J.W. Polak (2016) 'Reconstructing patterns of travel time use and productivity from Wi-Fi analysis'. 2nd International Workshop on Automated Data Collection Systems (Transit Data), 8-9 August, Boston, MA, USA.

(C14) Bris, M., J. Pawlak, and J.W. Polak (2016) 'How is ICT use linked to household transport expenditure? A cross-national macro analysis of 33 countries using instrumental variables'. 14th World Conference on Transport Research (WCTR), 10-15 July, Shanghai, China.

(C13) Pawlak, J., G. Circella, J.W. Polak, P.L. Mokhtarian, and A. Sivakumar, (2016) 'Is there anything exceptional about ICT use while travelling? A time allocation framework for and empirical insights into multitasking patterns and well-being implications from the Canadian General Social Survey'. 95th Annual Meeting of Transportation Research Board, 10-14 January, Washington D.C., USA.

(C12) Pawlak, J., J.W. Polak, and A. Sivakumar, (2015) 'Investigating Conditions for Robust Fusion of ICT and Travel behaviour Datasets'. International Association for Travel Behaviour Research Conference, 19-23 July, Windsor, United Kingdom.

(C11) Pawlak, J., A. Zolfaghari, and J.W. Polak (2015) 'Imputing Socioeconomic Attributes for Movement Data by analysing Patterns of Visited Places and Google Places Database: Bridging between Big Data and Behavioural Analysis'. 4th International Choice Modelling Conference, 11-13 July, Austin, TX, USA.

(C10) Pawlak, J., J.W. Polak, A. Sivakumar, and D. Gann (2015) 'Investigating Diffusion of Relationships between ICT and Travel Behaviour by Pooling Independent Cross-sections across Time'. 94th Annual Meeting of Transportation Research Board, 11-15 January, Washington D.C., USA.

(C9) Pawlak, J., J.W. Polak and A. Sivakumar (2014) 'Microsimulation-based Estimation of Value of Employer's Business Traveller's Value of Time: Comparison with the Current Estimation Practices and Implications for the Investment Appraisal'. 93rd Annual Meeting of Transportation Research Board, 12-14 January, Washington D.C., USA.

(C8) Pawlak J. (2014) 'On the Move: How Can We Model In-travel Activity Choice and Productivity in the Era of Nomadism and Multitasking?'. 46th

Universities' Transport Study Group Conference, 6-8 January, Newcastle, United Kingdom.

(C7) Pawlak, J., J.W. Polak and A. Sivakumar (2013) 'Making Productive Use of the Wasted: A Behavioural Model of Activity Choice for Business Travel and Implications of ICT Use for In-travel Productivity'. 3rd International Choice Modelling Conference, 3-5 July, Sydney, Australia.

(C6) Pawlak J., A. Sivakumar and J.W. Polak (2013) 'An Imputation Approach to the Fusion of Travel Diary and Lifestyle Data: Application to the Analysis of the Interaction of ICT and Physical Mobility', New Technologies and Techniques for Statistics (NTTS) 2013 Conference, 6-8 March, Brussels, Belgium.

(C5) Pawlak J., A. Sivakumar and J.W. Polak (2012) 'Digital Lifestyle, Physical Mobility and Value of Time in the Age of Nomadism and Polychronicity'. European Transport Conference, 8-10 October, Glasgow, United Kingdom.

(C4) Pawlak, J., A. Sivakumar, and J.W. Polak and (2012) 'Digital Behaviour and Physical Mobility: A Cross-country Structural Equation Approach'. International Association for Travel Behaviour Research Conference, 15-19 July, Toronto, Canada.

(C3) Pawlak, J., A. Sivakumar, and J.W. Polak and (2012) 'Tele-activities and Time Use Research: Implications of the Rapid Development of ICT from the Perspective of Time-specific Analysis of Household Activities'. 3rd Time Use Observatory Workshop, 21-23 March 2012, Santiago de Chile, Chile

(C2) Pawlak, J., J.W. Polak and A. Sivakumar (2011) 'The Consequences of the Productive Use of Travel Time: Revisiting the Goods-Leisure Trade-off in the Ear of Pervasive ICT'. 2nd International Choice Modelling Conference 4-6 July, Leeds, United Kingdom.

(C1) Pawlak, J. and J.W. Polak (2010) 'Time Allocation and Valuation of Travel Time Savings in the Presence of Simultaneous Activities'. European Transport Conference, 11-13 October, Glasgow, United Kingdom.

Theses	**(T3)**	Pawlak, J. (2014) 'Modelling the Relationships between Information and Communication Technologies and Travel Behaviour'. PhD Thesis. Centre for Transport Studies, Department of Civil and Environmental Engineering, Imperial College London. Supervisors: Prof. John W. Polak; Prof. David Gann, Dr. Aruna Sivakumar.

(T2) Pawlak, J. (2010) 'Time Sharing Activities: A Discrete Choice Modelling Framework For Travel Time Activities'. MSc Thesis. Centre for Transport Studies, Department of Civil and Environmental Engineering, Imperial College London. Supervisor: Prof. John W. Polak.

(T1) Pawlak, J. (2009) 'Can Introduction of a Suburban Train Scheme Reduce the Traffic Congestion? A Case Study of the Metropolitan Area of Poznan, Poland'. BSc (Econ) Dissertation. Department of Geography, University College London. Supervisor: Dr. Martin Sokol.

Projects:		**Project value:**
Awarded	**(A6) LandscapeFIRST: Assessment of Business Models' Feasibility for Local Authority Environmental Data** – as Intersection Analytics in collaboration with Fasteroute Ltd. and Strategy as Ecology Ltd. Funding: Buckinghamshire County Council and Buckinghamshire and Milton Keynes LEP. January 2018-December 2019.	£ 25,000

(A5)	**Data Driven Business Models in Smart City Contexts** – as Imperial College London, Industrial CASE award led by Imperial College Business School, Funding: The London Interdisciplinary Social Science Doctoral Training Partnership, Economic and Social Science Research Council, Cisco CREATE, United Kingdom, October 2018.	£ 117,138
(A4)	**ITINERANT: An interdisciplinary framework for disaggregate assessment of productivity and well-being impacts of digital technologies on knowledge workers in non-traditional settings** – as Imperial College London, Industrial CASE award, Funding: The London Interdisciplinary Social Science Doctoral Training Partnership, Economic and Social Science Research Council, Cisco CREATE, United Kingdom, October 2017-present;	£ 117,138
(A3)	**On-board connectivity: A disaggregate framework for activity-based demand forecasting and sensitivity analysis** – as Intersection Analytics Ltd. & Imperial College London, Funding: Cisco Country Digitization Acceleration, United Kingdom, April 2017-present;	£ 37,500
(A2)	**Superfast Wi-Fi In-carriage for Future Travel (Project SWIFT)** – as Intersection Analytics Ltd. in collaboration with Cisco CREATE (other partners: Level 3, CGI, Wittos, ScotRail), Funding: Innovate UK, RSSB, United Kingdom, February 2016-present;	£ 1,969,375
(A1)	**Relationships between Information and Communication Technologies and Physical Mobility** – as Imperial College London. Funding: Institute for Mobility Research (ifmo), BMW Group, Germany, 2013-2015.	£ 57,065 (€ 65,000)
	Total awarded:	£ 2,298,216
	including awards at Imperial College:	£ 336,341
Participation **(P11)**	**Integrated Development of Low-Carbon Energy Systems (IDLES): A Whole-System Paradigm for Creating a National Strategy** – Imperial College London. Funding: Engineering and Physical Sciences Research Council, United Kingdom, January 2019-ongoing;	£ 7,047,665
(P10)	**Airport Capacity Consequences Leveraging Aviation Integrated Modelling (ACCLAIM) –** Imperial College London. Funding: Engineering and Physical Sciences Research Council United Kingdom, January 2019-December 2019;	£613,965
(P9)	**Real-world Energy Flexibility through Electric Vehicle Energy Trading (E-FLEX)** – in collaboration with Cisco & Imperial College London (other partners: Nuvve, Transport for London, Greater London Authority, Cenex, E-Car Club), Funding: Innovate UK, United Kingdom, September 2018-present;	£ 5,291,534
(P8)	**City Mobility Services for Passengers through Innovative Real-time Demand Aggregation**	£ 1,341,598

(CitySPIRE) – in collaboration with Cisco CREATE (other partners: Purple Location Sciences, Transport for Greater Manchester, Sustainable Environment (Movement Strategies), Funding: Innovate UK, United Kingdom, June 2017-April 2018;	
(P7) Cityverve: Internet of Things City Demonstrator – in collaboration with Cisco CREATE and Manchester City Council. Funding: Innovate UK, United Kingdom, July 2016-June 2018;	£ 14,998,440
(P6) Secure Sensor Use in Real-world Environments (aSSURE) – in collaboration with Cisco CREATE (other partners: Asset Mapping, Johnson Controls Building Efficiency UK). Funding: Innovate UK, United Kingdom, March 2016-May 2017;	£ 749,389
(P5) Contingency Operations for Strategic Infrastructure and the Vulnerable (CONSERVE) – in collaboration with Cisco CREATE (other partners: Selex ES, Bronze Software Labs, University of Strathclyde, Scottish Water). Funding: Innovate UK, United Kingdom, January 2016-June 2017;	£ 678,936
(P4) Digital City Exchange – Imperial College London. Funding: Engineering and Physical Sciences Research Council United Kingdom, September 2014-2017;	£ 5,930,480
(P3) High Street Online Networked Environment (StONE) – in collaboration with Cisco CREATE and KILTR Ltd., total project value: 100,000 GBP. Funding: Technology Strategy Board, United Kingdom, 2014;	£ 100,000
(P2) Stations as a Service (StaaS) – in collaboration with Cisco CREATE and Prof. John Polak (other partners: Cisco, Abellio, Telent, Bronze Labs). Funding: Technology Strategy Board, United Kingdom, March 2014-2016;	£ 1,932,467
(P1) FoE Lifestyle Management Services – cross-departmental collaboration at Imperial College London. Funding: Faculty of Engineering, Imperial College London, United Kingdom, 2011;	£ 10,000

Skills:

Software	• **Scripting/Coding Languages:** R, Python, Ox, Maple, elements of C & C++; • **High Performance Computing:** PBS; • **Physical Computing:** Arduino; • **Survey design and collection:** Qualtrics, Typeform, SurveyMonkey • **Statistical Packages:** SPSS, MiniTab; • **Discrete Choice Modelling:** BIOGEME; • **Structural Equations Modelling:** LISREL, lavaan (R); • **Google API:** Maps, Distance Matrix, Places; • OmniTrans; Protege (basic); SUMO; • MS Office package.
Languages	• **Polish** native; • **English** proficient; • **German** intermediate.

| **Personal Interests** | • Sailing/ Yachting;
• Travelling, Hiking, Jogging, Swimming;
• Geography, History. |