# Cristian Domarchi

Research Fellow Department of Social Statistics and Demographics University of Southampton, England, UK

## Professional Summary

Civil Engineer with Major in Transport, Universidad de Concepción (Chile). MSc in Transport Engineering, Pontificia Universidad Católica (Chile). PhD in Behaviour Informatics at Newcastle University. 15-year experience in data collection and analysis, transport and social surveys, and statistical modelling.

#### EDUCATION

Newcastle University

Newcastle upon Tyne, UK

Email: cdomarchi@gmail.com

ORCID: 0000-0002-9068-704X/

Google Scholar: Fw626VgAAAAJ

Ph.D. in Behaviour Informatics

2019 - 2024

Thesis: Integrated diffusion and choice models for innovative transport alternatives: An application to the electric vehicle market

Supervisors: Prof. Elisabetta Cherchi, Dr. Quoc C. Vuong

Pontificia Universidad Católica de Chile

Santiago, Chile

M. Sc. in Engineering Sciences, Transportation and Logistics

2014 - 2017

Thesis: Modelling the behaviour of share taxi users in Santiago, Chile (Approved with maximum distinction)

Supervisors: Prof. Juan de Dios Ortúzar and Prof. Juan Enrique Coeymans

Universidad de Concepción

Concepción, Chile

B. Sc. in Civil Engineering with Major in Transport

2001 - 2007

Thesis: Effect of habit, attitudes and affective appraisal on modal choice and car use: an application to university

workers. (Approved with maximum distinction)

Supervisor: Prof. Alejandro Tudela

#### Professional Experience

# University of Southampton

Southampton, UK

Research fellow

2024 - current

Postdoctoral researcher working in Survey Futures, a large-scale research project funded by the UKRI-ESRC, and aiming to ensure large-scale social surveys in the UK can innovate and adapt in a changing environment.

Elsevier Remote

Administrative assistant

2019 - current

Assistant to the Editor-in-Chief of the Transportation Research Part A: Policy and Practice journal, Professor Elisabetta Cherchi.

Self-employed

Santiago, Chile

Newcastle upon Tyne, UK Technical advisor

Transport demand models, public transport systems, motorway traffic forecasting; analysis of public transport systems (buses and share taxi); estimations of fare evasion in Santiago's public transport systems; over 25 data collection studies for public transport systems, including origin-destination, stated choice, and satisfaction surveys.

DICTUC S. A. Santiago, Chile Transport modeller 2007 - 2018

Technical advisor for studies involving traffic demand estimation, public transport, and stated preferences studies in the transport context for clients including LAMSAC (Lima, Peru), TYPSA (Santiago, Chile), the Ministry of Transport and Telecommunications (Chile), and the Inter-American Development Bank (IADB).

## TEACHING EXPERIENCE

## Newcastle University

Newcastle upon Tyne, UK

Module leader: Professor Elisabetta Cherchi

Module leader: Professor Alejandro Tudela

2022 - 2023

Demonstrator/Teaching Assistant in two modules: CE8423 (Transport Research Methods, 2 terms), CEG8419 (Transport Modelling and Forecasting, 2 terms).

#### Universidad de Concepción

Concepción, Chile

2005 - 2006

Demonstrator/Teaching Assistant, Transportation Engineering module (3 terms).

### AWARDS AND SCHOLARSHIPS

- Newcastle Overseas Research Scholarship (NUORS, 2019) at Newcastle University, UK, funding PhD studies.
- Leverhulme Postgraduate Research Studentship at Newcastle University, UK (2019), funding PhD studies.
- DICTUC Scholarship (2014), for professionals working in DICTUC S. A., supporting post-graduate studies.
- "Faculty of Engineering" Award (2007), for academic achievement, Universidad de Concepción.
- Universidad de Concepción Scholarship (2001) as one of the top 10 admission scores.

#### Publications

Journal articles

- **Domarchi**, C. & Cherchi, E. (2024) Role of car segment and fuel type in the choice of alternative fuel vehicles: A cross-nested logit model for the English market. *Applied Energy* **357**, 122451.
- Domarchi, C. & Cherchi, E. (2023) Electric vehicle forecasts: a review of models and methods including diffusion and substitution effects. *Transport Reviews* **43(6)**, 1118–1143.
- Domarchi, C., Coeymans, J. E. & Ortúzar, J. de D. (2019) Shared taxis: Modelling the choice of a paratransit mode in Santiago de Chile. *Transportation* 46(6), 2243–2268.
- **Domarchi, C.**, Tudela, A. & González, A. (2008) Effect of attitudes, habit and affective appraisal on mode choice: an application to university workers. *Transportation* **35(5)**, 585–599.

#### Book chapters

- Domarchi, C. & Ortúzar, J. de D. (2021) A geography of road transport in cities. In: Vickerman, R. (ed.) International Encyclopedia of Transportation Vol. 5., 300–305, Elsevier, New York.
- Alcaíno, P., Domarchi, C. & López, S. (2012) Time, poverty and transport: An exploration into mobility patterns contribution to poverty measurements. In: Carrasco, J. A., Jara-Díaz, S. & Munizaga, M. (eds.) Time Use Observatory, 9-27. Instituto Sistemas Complejos de Ingeniería (ISCI), Santiago, Chile.

#### Selected conference articles

- Domarchi, C. & Cherchi, E. (2024) Role of car segment and fuel type in the choice of alternative fuel vehicles: A cross nested logit model for the English market. 103rd Transportation Research Board (TRB) Annual Meeting, Washington DC, January.
- Domarchi, C. & Cherchi, E. (2023) Changes in car ownership due to life events: Insights from the UK Longitudinal Survey. 11th Symposium of the European Association for Research in Transportation (hEART Conference), Zürich, Switzerland, September.
- Domarchi, C. & Cherchi, E. (2023) Joint models of car segment and fuel type choice for alternative fuel vehicles: application to the UK market. 16th International Conference on Travel Behaviour Research (IATBR), Santiago, Chile, December.
- Domarchi, C., Raveau, S., Iglesias, P., Muñoz, J. C. & Ortúzar, J. de D. (2019). Modelos de elección de ruta de transporte público en Santiago: Una aplicación con la herramienta STEP y datos de la encuesta origen-destino./Spanish. XIX Congreso Chileno de Ingeniería de Transporte, Santiago, Chile, October.

# REVIEWING

Reviewer for Transportation Research Part A, Travel Behaviour and Society, Geoforum, Research in Transportation Economics, Transport Policy, Transport Reviews.

# Software

- Generic software (advanced user level): MS Excel (including macros in Visual Basic), other Office components.
- Discrete choice software (advanced user level): Apollo, Pandas Biogeme, Alogit, Larch.
- Statistic software (advanced user level): R, Stata.
- Other (advanced user level): NetLogo, (user level): SPSS, QGis, LaTex, NGene, Python.

## Training

- Accredited Researcher, Office for National Statistics (UK), 2024–2028.
- Diploma in Statistics, Pontificia Universidad Católica (Chile), 2011.

## LANGUAGE

• Spanish (Native), English (Full professional proficiency).