Dr Nicolas Palominos

Urban Data Scientist, City Designer, Planner, Architect and Innovator.

With a background in both spatial analysis and design, my holistic approach to city design and urban analysis spans a range of scales and urban systems: from cities to neighbourhoods, transport to manufacturing. I have experience in applying computational, quantitative, visual and design methods to translate high-level questions into actionable knowledge. I am interested in the potential of geospatial data for the creative and strategic spatial analysis of urban systems to inform sustainable design.

professional practice

Consultant, Designer & Project Manager, Independent professional practice, Co-founded _Streets, working on data-driven analysis of the built environment. I worked with a team developing the methodology and conducting the analysis for the Healthy Streets Index, a citywide quantification of the quality of street environments that has been applied to London and other European contexts. Co-founded S3-Shared-Scooter-System, in 2017 an early-stage start-up developing a shared mobility project that offered analogue scooters for first-last mile trips of diverse users. Co-founded CAMINABLE, an urban design and planning consultancy that developed amongst others a 'green' neighbourhood master plan in Santiago's periphery and the Lota Commune Local Plan in the south of Chile. I have been the responsible architect designing, managing and coordinating various small and medium-scale projects. Collaborated with firms in projects of public interest; 'Port of Valparaiso Logistics Export Zone' (with GHD) and the 'Metropolitan Cathedral Archbishop's Crypt', Jan.2004–Present.

Designer and Analyst, The Comptroller General of the Republic of Chile, Designing and implementing a country-wide Geospatial information web platform to foster civic engagement (GEO-CGR) that promoted the monitoring of public expenditure in infrastructure. I was the technical lead of the multidisciplinary team that developed the methodology to record the location data of stakeholders from local to national scale. The implementation of the project involved the delivery of workshops and presentations for installing capacities at the regional level, and the coordination of a knowledge exchange cooperation with the superior audit institution of Peru. The GEO-CGR platform has been an important contribution to improving the analytical capacity for the coordination, management and transparency of public works across the country. From 2009-2011, I conducted more than 20 Regulatory Assessments of urban planning instruments of different geographic scale and complexity, Oct.2009–Aug.2016.

Project Manager & Designer, Ministry of Housing and Planning, Chile, Leading the multidisciplinary task force that designed the urban Master Plan for two deprived neighbourhoods as part of a government program of urban regeneration. Implemented the master plan across all stages from design to construction. This considered developing on site surveys, public participation workshops and reporting to public authorities and national coordinators, Aug.2006–Aug.2009. academic positions **Teaching**

- Associate Lecturer (Teaching) in Spatial Data Science, University College London, CASA0013, 'Foundations of Spatial Data Science' & Dissertation supervision, 2021–2022.
- Senior Postgraduate Teaching Assistant, University College London, Modules 'Geographic Information Systems and Science' (Centre for Advanced Spatial Analysis) and 'GIS for Planners' (Bartlett School of Planning), 2017–2020.
- Postgraduate Teaching Assistant, University College London, BASc, Module 'Understanding Cities and their Spatial Cultures', 2017–2018.
- Teaching Associate, School of Architecture, Universidad Tecnologica Metropolitana, Chile, Modules 'The History of Cities' and 'Theory of City Form', 2013–2016.

Research

- Research Fellow, Centre for Advanced Spatial Analysis, UCL, 'Socio-hydrological resilience in Mexico City', 2020–2021.
- Research Assistant, Cass Cities London Metropolitan University, Industrial Activities in Southwark survey and research, 2019–2020.
- Research Assistant, The Bartlett Faculty of the Built Environment, UCL, Planning Urban Manufacturing project, Bartlett Synergy Grant (BSP, BSA) and Cities of Making project (BSEER), Circular Economy Lab, 2018–2019.
- Researcher, LSE Cities, Ordinary Streets project, 2012.

education

- PhD., Advanced Spatial Analysis, University College London, 2021, 'Rethinking Streets: a study of streetspace allocation metrics and street networks in London'.
- MSc., City Design and Social Science, The London School of Economics and Political Science, 2012, 'Urban justice and the city as a political project', Merit.
- Title of Architect, Pontificia Universidad Catolica de Chile, 2004, Two votes of Distinction. B. Arch., Pontificia Universidad Catolica de Chile, 2004, .

Training

- Territorial Competitiveness Policy, Latin American and Caribbean Institute for Economic and Social Planning, 2015, Chile.
- Introduction to Geospatial Information Management, Universidad Tecnologica Metropolitana, 2013, Chile.
- Diploma in Urban and Environment Law, Universidad de Talca, 2011, Chile.
- Urban Plans and Planning Regulations, Pontificia Universidad Catolica, 2010, Chile.
- Diploma in Urban Management and Governance, Pontificia Universidad Catolica, 2007, Chile.

computer skills & Languages & Software

R for statistical and spatial analysis, QGIS, Python. Git, Docker, SQL. CAD, vector and raster graphics softwares. Tableau

Web apps & Data sets

Streetspace Allocation $Urban\ Transect\ London,\ 2019$

Streetspace open data set for London, 2020

grants & awards

- Innovate UK. Sustainable Innovation Fund 2020, 'Smart Walkability Platform', 2020 phase 1 (Technical team expert)
- Bartlett Innovation Fund. Enterprise Advisory Group, project "Sustainable Mobility and Urban Planning Analytics", 2020 (in partnership with *Healthy Streets* and *TranquilCity*)
- Becas Chile PhD & Master Scholarships, National Commission for Scientific and Technological Research, *Chile* 2011, 2016

Grants (professional practice)

- Institutional strengthening to improve transparency and citizen participation in public works surveillance systems, Federal Ministry for Economic Cooperation and Development (BMZ) of Germany, *Chile* 2014–2015
- CH-T1135: Institutional Strengthening of the Comptroller General, for improving transparency, accountability and effectiveness of public administration, Inter-American Development Bank, *Chile* 2013–2015

Awards

- Parcel Hack 2019 'Hacking the last-mile', FTC2050 (EPSRC), CitySprint, Transport for London and Geovation, *First place*
- Metropolitan Government, Santiago de Chile, Award to Dissertation of Metropolitan Impact, 'Urban operations in the periphery: educational facilities for city regeneration' 2003

memberships

International Seminar on Urban Form, seeks to advance research and practice in fields concerned with the built environment, 2021