Daniel Mateo Neira

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Phone: +44 739 732 5982

EDUCATION

MSc. Smart Cities and Urban Analytics, University College London, 2017

BSc. Architecture and Urbanism, Universidad de Cuenca, 2015

RESEARCH INTERESTS

Spatial data science: statistics/machine learning, spatial analysis, visualization, and spatio-temporal data mining.

Complex systems: complexity theories of cities, systems theory.

Network science: socio-spatial networks and theory.

Urban form, design and planning.

PUBLICATIONS

Conference Papers

- 2017 Hermida, M.A. Neira, M. Cabrera-Jara, N. Osorio, P. "Resilience in Latin American cities: behaviour vs. space quality in the riverbanks of the Tomebamba River." *Procedia Engineering* (in print).
- Orellana, D. Neira, M. Guerrero, M.L. Samaniego P. Hermida, M.A. "New geotools for urban studies." *Proceedings of SBE16 Sustainable Urban Communities towards a Nearly Zero Impact Built Environment*, Victria, Brasil. Vol 2. P.857-866. ISBN 978-85-92631-00-0.
- Osorio, P. Neira, M. Hermida, M.A. "Historic relationship between urban dwellers and the Tomebamba River." *Proceedings of SBE16 Sustainable Urban Communities towards a Nearly Zero Impact Built Environment*, Victria, Brasil. Vol 3. P.1385-1394. ISBN 978-85-92631-00-0.

RESEARCH EXPERIENCE

2015–16 Research Assistant

llacta Lab - Sustainable Cities Research Group, Universidad de Cuenca Principal Investigator: Daniel Orellana and Maria Augusta Hermida

2011–13 Research Assistant

Faculty of Architecture and Urbanism, Universidad de Cuenca

Principal Investigator: Boris Orellana

TEACHING EXPERIENCE

Universidad de Cuenca

2017 Workshop Assistant

Road networks and scaling laws

Oxford Summer School

2011 Teaching Assistant (Spring 2011, Summer 2011)

Mathematic II

Undergraduate Course

2010–11 Teaching Assistant (Fall 2010, Spring 2011)

Mathematics I

Undergraduate Course

PROFESSIONAL EXPERIENCE

2017 Centre for Advanced Spatial Analysis, UCL

Consultant

London, United Kingdom

2016 Silvana Regalado Consultants

GIS Technician

Caar, Ecuador

2014–15 Duran Hermida Arquitectos Asociados

Design Assistant

Cuenca, Ecuador

2011–14 Arquitectura y Diseño A&D

Design Assistant

Cuenca, Ecuador

2011 CA Constructura

CAD Drafter

Cuenca, Ecuador

SKILLS AND METHODS

Statistical and Computational Methods

Multivariate statistics and various machine learning algorithms, systems analysis, data mining, data wrangling, Python (including numpy, scipy, pandas, matplotlib, statsmodels,

networkx, and scikit-learn), web scraping, agent-based modeling and microsimulation (Netlogo), R, JavaScript, HTML, MySQL, Postgres.

Geospatial Methods

 $\rm GIS,$ spatial analysis, network analysis, QGIS, ArcGIS, PostGIS, geopandas, urban modeling and simulation, Leaflet, Mapbox, Space Syntax.

Data Visualization and Design

JavaScript (including D3), Tableau, MapboxGl, Processing, Illustrator, Photoshop, Indesign, Revit, Autocad.

Updated June 2017