# joaomeirelles

joaovitormeirelles@usp.br

## **about**

born: 02/07/1989 Rio de Janeiro, Brazil urbancomplexity.tumblr twitter/joaovmeirelles

#### languages

Portuguese native English fluent Spanish fluent German basic

#### programming

Python R SQL GIS processing NetLogo

## education

2013 - 2015	Scaling Laws in Brazilian Cities	USP
2014	Big Data Analytics long term course Rio de Janeiro Transportation Network Analysis	FGV
2014	XII Summer School on Cities and Complexity Evolution of Work Specialization in Cities	ISCV, Chile
2008–2012	Environmental and Water Resources Engineering Pattern Recognition of Urban Environmental Impact Using Data Mining Tools	UFF

## professional

2014 -	PENSA - Big Data Team of Rio de Janeiro City Hall transportation and environmental data analysis	Data Scientist
2013	Institute for Sustainable Development, Ethiopia biodigestors and rainwater harvesting systems	Environmental Engineer
2012 - 2013	Pereira Passos Urbanism Intitute, Rio data analysis and geoprocessing	Intern
2011 - 2012	UN-Habitat / ROLAC, Rio urban indicators analysis	Intern
2010 - 2011	Aqua Modelo, Rio hydrological studies and hydrodynamic modelling	Intern

### academic

2015	Co-advisor of Undergraduate Final Project project Spatial-Temporal Patterns in Soil Contamination in Itaborai-RJ	UFF
2014	<b>5ªMeeting on Complex Systems</b> UNESCO Complex Systems Digital Catalk <i>Cities as Complex Systems</i>	mpus
2014	Teacher Assistant on Digital Image Processing and GIS tutorials and practical lessons	USP
2014	Research Project on ABM + GIS development of a agent based model with GIS of riots	USP
2013	Research Project on Numerical Weather Prediction for Rio development of mathematical models of weather predictions	UFF
2011 - 2013	Research Project Water Oriximina temporal and spatial analysis of water quality	UFF
2011 - 2013	Research Project Ecorrauze architecture environmental impact assessment	UFF
2011	Teacher Assistant on Public and Environmental Health tutorials and practical lessons	UFF

## **publications**

2015	19th International Conference on Circuits, Systems, Communications and Computers
	accepted paper: Using Buses GPS data to measure changes in the quality of public transportation
2015	2015 International Conference on Location-based Social Media accepted paper: Digital footprints in the city - Segregation in networks
2014	5th World Congress on Social Simulation accepted paper: London Riots with ABM+GIS
2014	XIX National Encounter on Demographic Studies accepted paper: Urban Mobility in Rio de Janeiro
2014	XIV Brazilian Congress on Geology of Environmental Engineering ABGE paper published <i>Performance Evaluation of High-Resolution Ensemble Prediction Models for Rio de Janeiro Region</i>
2013	<b>2ªJourney on Urban Modeling and Morphology</b> paper published <i>Patterns of Urban Environmental Impacts</i>
2012	<b>5th Urbenviron International Seminar</b> paper published <i>Application of Life Cycle Assessment in The Evaluation of The Environmental Impact of Cities</i>
2012	<b>Regional Urban Observatory in the Fluminense Region</b> UN-Habitat book chapter <i>Monitoring Socioeconomic Indicators of the Municipalities</i>
2012	<b>2nd Symposium on Environmental Geochemistry of the Tropics</b> paper published <i>Space-time assessment of water quality and it's correlation with waterborne diseases in Oriximiná (PA) - Brazil</i>

#### courses

Dynamical Systems in Biology – ICTP-SAIFR
Computing for Data Analysis – Coursera (MOOC)
Data Visualization – Coursera (MOOC)
Model Thinking – Coursera (MOOC)
Introduction to Dynamical Systems and Chaos – Complexity Explorer (MOOC)
Introduction to Complexity – Complexity Explorer (MOOC)
Tools and Methodologies for Sustainable Cities – UN-Habitat
Urban Ecology – Universidad Autonoma de Madrid
Green Infrastructure – InVerde
Eco-design – UFRJ
Environmental Planning – UFF