

# Juste Raimbault

## Curriculum Vitae

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### Publications

- Raimbault, J. (2016). Generation of Correlated Synthetic Data, forthcoming in *Actes des Journées de Rochebrune 2016*.
- Raimbault, J. (2015). Models Coupling Urban Growth and Transportation Network Growth: An Algorithmic Systematic Review Approach, forthcoming in *ECTQG 2015 proceedings*.
- Raimbault, J. (2015). User-Based Solutions for Increasing Level of Service in Bike-Sharing Transportation Systems. In *Complex Systems Design & Management* (pp. 31-44). Springer International Publishing. **Best Student Paper Award at CSDM 2014.**
- Raimbault, J., Banos, A. & Doursat, R. (2014) A Hybrid Network/Grid Model of Urban Morphogenesis and Optimization. *Proceedings of the 4th International Conference on Complex Systems and Applications (ICCSA 2014)*, June 23-26, 2014, Université de Normandie, Le Havre, France; M. A. Aziz-Alaoui, C. Bertelle, X. Z. Liu, D. Olivier, eds.: pp. 51-60.

### Communications

- Raimbault, J. & Serra, H. (2016). Game-based Tools as Media to Transmit Freshwater Ecology Concepts, *presentation accepted for SETAC 2016 (Nantes, may 2016)*.
- Le Nechet, F. & Raimbault, J. (2015). Modeling the emergence of metropolitan transport authority in a polycentric urban region, *ECTQG 2015 (Bari, sept. 2015)*.
- Raimbault, J. (2015). Hybrid Modeling of a Bike-Sharing Transportation System, *poster presented at ICCSS 2015 (Helsinki, june 2015)*.
- Raimbault, J. & Gonzales, J. (2015). Application de la Morphogénèse de Réseaux Biologiques à la Conception Optimale d'Infrastructures de Transport, *poster presented at Rencontres du Labex Dynamite (Paris, may 2015)*.
- Raimbault, J. (2014). When Open Data are Incomplete : Inference of Missing Data for Model Parameterization, *lightning talk at Scientific Open Data Conference (St Mandé, march 2014)*.

### Working Papers

- Raimbault, J. & Keutchayan J. (2015). A Discrepancy-based Framework to Compare Robustness between Multi-Objective Evaluations, *submitted to CSDM 2016*.
- Raimbault, J. & Marandon E. (2015). Optimizing the Extraction of Information from a Complex System, *submitted to EPJ Data Science*.

### Education

- since Feb. 2015 **PhD in Geography**, Géographie-Cités (UMR 8504 CNRS) / LVMT (UMR-T 9403 IFSTTAR), Paris, France.  
Towards Coupling Transportation Networks and City Growth in Complex Urban Systems Models, *under the supervision of HDR A. BANOS and MCF F. LE NECHET*.
- 2012–2014 **MSc Complex Systems Science**, Ecole Polytechnique ParisTech, Palaiseau, France.  
Agent-based modeling, Evidence-based methods from Therapeutic Evaluation, Theoretical Analysis of Physical Complex Systems, Epistemology, Complex Networks, Datamining, Signal Processing
- 2013–2014 **MSc Urbanism, Environment, Transportation**, Ecole Nationale des Ponts et Chaussées ParisTech, Marne-la-Vallée, France.  
Analysis of Territorial Systems, Management and design of Transportation Systems, Urbanism, History of Urbanism, Urban Economics, Environmental Planning and Design
- 2010–2012 **BSc**, Ecole Polytechnique ParisTech, Palaiseau, France.  
Multidisciplinary scientific formation (mathematics, computer science, applied mathematics, physics, mechanics, biology, economics)

## Professional experience

- since Sep. 2015 **Teaching Assistant**, *Université Paris 7*, Paris, France.  
Teaching Assistant in *Introduction to Geography* and *Introduction to GIS* courses.
- Aug.–Dec. 2014 **Research internship**, *L2 Technologies*, Paris, France.  
Complex Network Analysis for Real-Time Trend Detection in a Financial System
- April–Sept. 2013 **Research internship**, *Chalmers University of Technology, Department of Architecture*, Goteborg, Sweden.  
Application of evidence-based methods in Urban Planning and Architecture
- July–Sept. 2012 **Company internship**, *The Kube SA*, Paris, France.  
Design and implementation of an intelligent matching algorithm

## Computer skills

OS	Unix (OSX, CentOS)	Scripts	Shell, AppleScript
Programming	JAVA, C/C++, Python, Scala, OCaml	Typography	L <sup>A</sup> T <sub>E</sub> X, API OO.org
Web	php, XHTML, CSS, AJAX	Database	MySQL, MongoDB
Scientific	R, NetLogo, Gama, OpenMole, Scilab, Matlab, Gephi, Freefem++	GIS	QGIS, PostGIS, TransCAD, Ocad