Juste Raimbault

Curriculum Vitae

 $13 \ {\rm rue} \ du \ {\rm Four}$ $75006 \ {\rm Paris}, \ {\rm France}$ > +33648136295 = juste.raimbault@polytechnique.edu

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. (2016). For a Cautious Use of Big Data and Computation, presentation accepted for RGS 2016 (London, September 2016).

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 authorithy 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. **PhD in Geography**, Géographie-Cités (UMR 8504 CNRS) / LVMT (UMR-T 9403 IFSTTAR), Paris, 2015 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.

 $\label{eq:multidisciplinary scientific formation (mathematics, computer science, applied mathematics, physics, mecanics, biology, economics)$

Professional experience

since Sep. Teaching Assistant, Université Paris 7, Paris, France.

2015 Teaching Assistant in Introduction to Geography and Introduction to GIS courses.

Aug.-Dec. Research internship, L2 Technologies, Paris, France.

2014 Complex Network Analysis for Real-Time Trend Detection in a Financial System

April-Sept. Research internship, Chalmers University of Technology, Department of Architecture, Goteborg,

2013 Sweden

Application of evidence-based methods in Urban Planning and Architecture

July-Sept. Company internship, The Kube SA, Paris, France.

2012 Design and implementation of an intelligent matching algorithm

Computer skills

OS Unix (OSX, CentOS) Scripts Shell, AppleScript Programming Java, Python, Scala, C/C++, OCaml Typography LATEX, API OO.org

 $\begin{tabular}{lll} Web & php, XHTML, CSS, AJAX & Database & MySQL, MongoDB, PostgreSQL \\ \end{tabular}$

Scientific R, NetLogo, Gama, OpenMole, Scilab, Mat-GIS QGIS, PostGIS, TransCAD, Ocad

lab, Gephi, Freefem++