Nicolas P. Rougier's bibliography

Latest update on May 6, 2018.

CN Computational Neurosciences / Neurosciences – OS Open Science / Reproducible Science SC Scientific Computing / Scientific visualization – CG Computer Graphics

Preprints

PP.1   N. P. Rougier and J. Timmer. "Ten Simple Rules for Scientific Fraud & Misconduct". In: *HAL* (2017).   OS

PP.2   S. Shivkumar, V. S. Chakravarthy, and N. P. Rougier. "Modeling the Role of Striatum in Stochastic Multi Context Tasks". In: *BioRxiv* (Sept. 2017).   CN

PP.3   M. Topalidou, D. Kase, T. Boraud, and N. P. Rougier. "Dual Competition between the Basal Ganglia and the Cortex: from Action-Outcome to Stimulus-Response". In: *BioRxiv* (2017).   CN

Replications

RE.1   N. P. Rougier. "[Re] Weighted Voronoi Stippling". In: *ReScience* 3.1 (2017).   CG

RE.2   M. Topalidou and N. P. Rougier. "[Re] Interaction between cognitive and motor cortico-basal ganglia loops during decision making: a computational study". In: *ReScience* 1.1 (2015).   CN

Correspondences

CO.1   N. P. Rougier and K. Hinsen. "Code reviewing puts extra demands on referees". In: *Nature* 556.7701 (Apr. 2018), pp. 309–309.   OS

CO.2   O. Guest and N. P. Rougier. "Diversity in reproducibility". In: *IEEE CDS Newsletter* 13.2 (2017).   OS

CO.3   O. Guest and N. P. Rougier. "What is computational reproducibility?" In: *IEEE CDS Newsletter* 13.1 (2016).   OS

CO.4   M. Topalidou, A. Leblois, T. Boraud, and N. P. Rougier. "A Long Journey into Reproducible Computational Neuroscience". In: *Frontiers in Computational Neuroscience* 9.28 (2015).   OS

CO.5   N. P. Rougier and F. Alexandre. "Emergence of Representations Through Interactions of a Robot with the Real World". In: *ERCIM News* 53 (2003), pp. 22–23.   CN

Highlights

HI.1   M. Hutson. "Artificial intelligence faces a replication crisis". In: *Science* 359.6377 (Feb. 2018).
Interview about the ReScience journal, see also [IJ.3].

HI.2   "How to draw perfect figures". In: *Nature* 513.7519 (Sept. 2014), pp. 463–463.
Social selection about Ten Simple Rules for Better Figures, see also [IJ.8].

HI.3   C. Woolston. "How to dodge the pitfalls of bad illustrations". In: *Nature* (Sept. 2014).
Highlight on Ten Simple Rules for Better Figures, see also [IJ.8].

Journals

IJ.1   F. C. Y. Benureau and N. P. Rougier. "Re-run, Repeat, Reproduce, Reuse, Replicate: Transforming Code into Scientific Contributions". In: *Frontiers in Neuroinformatics* 11 (Jan. 2018). `OS`

IJ.2   N. P. Rougier. "A Density-Driven Method for the Placement of Biological Cells Over Two-Dimensional Manifolds". In: *Frontiers in Neuroinformatics* 12 (Mar. 2018). `CN`

IJ.3   N. P. Rougier, K. Hinsen, F. Alexandre, T. Arildsen, L. Barba, F. C. Y. Benureau, C. T. Brown, P. de Buyl, O. Caglayan, A. P. Davison, M. A. Delsuc, G. Detorakis, A. K. Diem, D. Drix, P. Enel, B. Girard, O. Guest, M. G. Hall, R. N. Henriques, X. Hinaut, K. S. Jaron, M. Khamassi, A. Klein, T. Manninen, P. Marchesi, D. McGlinn, C. Metzner, O. L. Petchey, H. E. Plesser, T. Poisot, K. Ram, Y. Ram, E. Roesch, C. Rossant, V. Rostami, A. Shifman, J. Stachelek, M. Stimberg, F. Stollmeier, F. Vaggi, G. Viejo, J. Vitay, A. Vostinar, R. Yurchak, and T. Zito. "Sustainable computational science: the ReScience initiative". In: *PeerJ Computer Science* 3 (Dec. 2017), e142. `OS`

IJ.4   C. Piron, D. Kase, M. Topalidou, M. Goillandeau, N. P. Rougier, and T. Boraud. "The globus pallidus pars interna in goal-oriented and routine behaviors: Resolving a long-standing paradox". In: *Movement Disorders* (2016). `CN`

IJ.5   W. Taouali, L. Goffart, F. Alexandre, and N. P. Rougier. "A parsimonious computational model of visual target position encoding in the superior colliculus". In: *Biological Cybernetics* 109.4-5 (2015). `CN`

IJ.6   G. Detorakis and N. P. Rougier. "Structure of Receptive Fields in a Computational Model of Area 3b of Primary Sensory Cortex". In: *Frontiers in Computational Neuroscience* (2014). `CN`

IJ.7   N. P. Rougier. "Antialiased 2D Grid, Marker, and Arrow Shaders". In: *Journal of Computer Graphics Techniques (JCGT)* 3.4 (2014), pp. 1–52. `CG`

IJ.8   N. P. Rougier, M. Droettboom, and P. E. Bourne. "Ten Simple Rules for Better Figures". In: *PLoS Computational Biology* 10.9 (2014). `OS`

IJ.9   N. P. Rougier. "Higher Quality 2D Text Rendering". In: *Journal of Computer Graphics Techniques (JCGT)* 2.1 (2013), pp. 50–64. `CG`

IJ.10   N. P. Rougier. "Shader-based Antialiased Dashed Stroke Poylines". In: *Journal of Computer Graphics Techniques (JCGT)* 2.2 (2013), pp. 105–121. `CG`

IJ.11   G. I. Detorakis and N. P. Rougier. "A Neural Field Model of the Somatosensory Cortex: Formation, Maintenance and Reorganization of Ordered Topographic Maps". In: *PLoS ONE* 7.7 (2012), e40257. `CN`

IJ.12   N. P. Rougier and J. Fix. "DANA: Distributed numerical and adaptive modelling framework". In: *Network: Computation in Neural Systems* 23.4 (2012), pp. 237–253. `CN`

IJ.13   J. Fix, N. P. Rougier, and F. Alexandre. "A Dynamic Neural Field Approach to the Covert and Overt Deployment of Spatial Attention". In: *Cognitive Computation* 3.1 (2011), pp. 279–293. `CN`

IJ.14   N. P. Rougier and Y. Boniface. "Dynamic Self-Organising map". In: *Neurocomputing* 74.11 (2011), pp. 1840–1847. `CN`

IJ.15   N. P. Rougier and A. Hutt. "Synchronous and Asynchronous Evaluation of Dynamic Neural Fields". In: *Journal of Difference Equations and Applications* 17.8 (2011). `CN`

IJ.16   W. Taouali, T. Viéville, N. P. Rougier, and F. Alexandre. "No Clock to Rule Them All". In: *Journal Of Neurophysiology, Paris* 105.1–3 (2011). `CN`

IJ.17   A. Hutt and N. P. Rougier. "Activity spread and breathers induced by finite transmission speeds in two-dimensional neural fields". In: *Physical Review E* 82.5 (2010). `CN`

IJ.18   N. P. Rougier. "Implicit and Explicit Representations". In: *Neural Networks* 22.2 (2009), pp. 155–160. `CN`

IJ.19   J. Fix, N. P. Rougier, and F. Alexandre. "From physiological principles to computational models of the cortex". In: *Journal of Physiology, Paris* (2007), pp. 32–39. `CN`

IJ.20   N. P. Rougier. "Dynamic Neural Field with Local Inhibition". In: *Biological Cybernetics* 94.3 (2006), pp. 169–179. `CN`

IJ.21   N. P. Rougier and J. Vitay. "Emergence of Attention within a Neural Population". In: *Neural Networks* 19.5 (2006), pp. 573–581. `CN`

IJ.22 N. P. Rougier, D. C. Noelle, T. D. Braver, J. D. Cohen, and R. C. O'Reilly. "Prefrontal Cortex and Flexible Cognitive Control: Rules Without Symbols". In: *Proceedings of the National Academy of Science* 102.20 (2005), pp. 7338–7343. `CN`

IJ.23 N. P. Rougier and R. C. O'Reilly. "A Gated Prefrontal Cortex Model of Dynamic Task Switching". In: *Cognitive Science* 26.4 (2002), pp. 503–520. `CN`

Book & Thesis

BK.1 N. P. Rougier. *Python & OpenGL for Scientific Visualization.* Zenodo, 2018. To appear. `OS`

BK.2 N. P. Rougier. *From Python to Numpy.* Zenodo, 2016. `OS`

BK.3 G. Varoquaux, E. Gouillart, O. Vahtras, V. Haenel, N. P. Rougier, R. Gommers, F. Pedregosa, Z. Jedrzejewski-Szmek, P. Virtanen, C. Combelles, D. Pinte, R. Cimrman, A. Espaze, A. Chauve, and C. Burns. *Scipy Lecture Notes.* Zenodo, 2015. `OS`

BK.4 N. P. Rougier. "Fondements biologiques pour le calcul distribué, numérique et adaptatif". Habilitation. Université Nancy II, May 2011. `CN`

BK.5 N. P. Rougier. "Modèles de mémoires pour la navigation autonome". PhD thesis. Université Henri Poincaré - Nancy I, Oct. 2000. `CN`

Book Chapters

CH.1 F. Alexandre, P. F. Dominey, P. Gaussier, B. Girard, M. Khamassi, and N. P. Rougier. "When Artificial Intelligence and Computational Neuroscience meet". In: *A guided tour of artificial intelligence research, Vol. 3 Interfaces and applications of artificial intelligence.* To appear. Springer-Verlag, 2018. `CN`

CH.2 I. C. Kaadoud, N. Rougier, and F. Alexandre. "Implicit Knowledge Extraction and Structuration from Electrical Diagrams". In: *Advances in Artificial Intelligence: From Theory to Practice.* Springer International Publishing, 2017, pp. 235–241. `CN`

CH.3 A. Hutt and N. P. Rougier. "Numerical simulation scheme of one-and two-dimensional neural fields involving space-dependent delays". In: *Neural Field Theory.* Ed. by P. beim Graben, S. Coombes, R. Potthast, and J. Wright. Springer, 2014. `CN`

CH.4 N. P. Rougier and G. I. Detorakis. "Self-Organizing Dynamic Neural Fields". In: *Advances in Cognitive Neurodynamics (III).* Ed. by Y. Yamaguchi. Springer, 2013. `CN`

CH.5 W. Taouali, N. P. Rougier, and F. Alexandre. "Visual Target Selection Emerges from a Bio-inspired Network Topology". In: *Computational Intelligence.* Ed. by K. Kurosh Madani, A. Correia, A. Rosa, and J. Filipe. Springer-Verlag, 2012. `CN`

CH.6 J. Fix, J. Vitay, and N. P. Rougier. "A Computational Model of Spatial Memory Anticipation during Visual Search". In: *Anticipatory Behavior in Adaptive Learning Systems: From Brains to Individual and Social Behavior.* Ed. by M. Butz, O. Sigaud, G. Pezzulo, and G. Baldassarre. Springer-Verlag Berlin Heidelberg, 2007. `CN`

CH.7 J. Vitay, N. P. Rougier, and F. Alexandre. "A distributed model of visual spatial attention". In: *Biomimetic Neural Learning for Intelligent Robotics.* Ed. by S. Wermter, G. Palm, and M. Elshaw. Springer-Verlag, 2005. `CN`

CH.8 H. Frezza-Buet, N. P. Rougier, and F. Alexandre. "A cerebral framework for the integration of biologically inspired temporal mechanisms for sequence processing". In: *Neural, symbolic and Reinforcement methods for sequence learning.* Ed. by L. Giles and R. Sun. Springer, 2000. `CN`

CH.9 N. P. Rougier. "Mémoires déclarative et procédurale pour la navigation autonome d'un animat". In: *Intelligence artificielle située. Cerveau, corps et environnement.* Ed. by A. Drogoul and J. Meyer. Hermès, 1999. `CN`

Conferences/Short Papers/Posters

CI.1 N. P. Rougier and B. Esfahbod. "Digital Typography & Rendering". In: *ACM SIGGRAPH.* Vancouver, Canada, Aug. 2018. `CG`

CI.2 A. Strock, N. P. Rougier, and X. Hinaut. "A Simple Reservoir Model of Working Memory with Real Values". In: *International Joint Conference on Neural Networks.* Rio, Brazil, July 2018. `CN`

CI.3 F. Benureau, T. Boraud, and N. P. Rougier. "Habits That Contradict Rewards". In: *7th Joint IEEE International Conference on Development and Learning and on Epigenetic Robotics.* Lisbon, Portugal, Sept. 2017. `CN`

CI.4 B. T. Nallapu, B. R. Surampudi, and N. P. Rougier. "The art of scaling up : a computational account on action selection in the basal ganglia". In: *International Joint Conference in Neural Networks (IJCNN).* May 2017. `CN`

CI.5 N. P. Rougier and Y. Boniface. "Motivated Self-Organization". In: *12th International Workshop on Self-Organizing Maps and Learning Vector Quantization,* Nancy, France, June 2017. `CN`

CI.6 B. T. Nallapu, N. P. Rougier, and B. R. Surampudi. "The art of scaling up : a computational account on action selection in basal ganglia". In: *3rd Annual Conference of the Association for Cognitive Science, India.* 2016. `CN`

CI.7 B. T. Nallapu and N. P. Rougier. "Dynamics of reward based decision making a computational study". In: *ICANN.* 2016. `CN`

CI.8 L. Campagnola, A. Klein, C. Rossant, and N. P. Rougier. "VisPy: Harnessing The GPU For Fast, High-Level Visualization". In: *Scipy, USA.* 2015. `SC`

CI.9 K. Hinsen and N. P. Rougier. "The ReScience initiative". In: *Euroscipy.* 2015. `OS`

CI.10 B. T. Nallapu, B. R. Surampudi, and N. P. Rougier. "Factors affecting reward based decision making : a computational study". In: *CBC, India.* 2015. `CN`

CI.11 N. P. Rougier. "Glumpy". In: *Euroscipy.* 2015. `SC`

CI.12 M. Topalidou, D. Kase, T. Boraud, and N. P. Rougier. "The Formation of habits". In: *CNS, Prague.* 2015. `CN`

CI.13 M. Topalidou, C. Piron, D. Kase, T. Boraud, and N. P. Rougier. "The Formation of habits". In: *SBDM, Paris.* 2015. `CN`

CI.14 M. Topalidou, C. Piron, D. Kase, T. Boraud, and N. P. Rougier. "The Formation of Habits: implicit supervision of the basal ganglia". In: *RLDM, Canada.* 2015. `CN`

CI.15 N. P. Rougier. "Modern Scientific Visualization". In: *X Developer's Conference.* 2014. `SC`

CI.16 L. Campagnola, A. Klein, C. Rossant, and N. P. Rougier. "Vispy – a future tool for interactive visualization". In: *BI Forum.* 2013. `SC`

CI.17 L. Campagnola, A. Klein, C. Rossant, and N. P. Rougier. "Vispy: A Modern and Interactive Visualization Framework". In: *Euroscipy.* 2013. `SC`

CI.18 G. I. Detorakis and N. P. Rougier. "Skin Topographic Maps in SI". In: *Progress in Neural Field Theory.* 2012. `CN`

CI.19 N. P. Rougier and G. I. Detorakis. "Self-Organizing Dynamic Neural Fields". In: *Third International Conference on Cognitive Neurodynamics.* 2011. `CN`

CI.20 N. P. Rougier and J. Fix. "Distributed, Numerical, Asynchronous and Adaptive computing framework". In: *Python in Neuroscience, EuroScipy satellite.* 2011. `CN`

CI.21 N. P. Rougier. "DANA". In: *EuroScipy.* 2010. `CN`

CI.22 N. P. Rougier. "From Computational Neurosience to Cellular Automata". In: *Automata.* 2010. `CN`

CI.23 W. Taouali, N. P. Rougier, and A. Frédéric. "Saccades generation : from the visual input to the superior colliculus". In: *International Conference on Neural Computation ICNC.* 2010. `CN`

CI.24 W. Taouali, A. Frédéric, A. Hutt, and N. P. Rougier. "Asynchronous Evaluation as an Efficient and Natural Way to Compute Neural Networks". In: *7th International Conference of Numerical Analysis and Applied Mathematics - ICNAAM.* 2009. `CN`

CI.25 J. Fix, N. Rougier, and F. Alexandre. "A top-down attentional system scanning multiple targets with saccades". In: *From Computational Cognitive Neuroscience to Computer Vision.* 2007. `CN`

CI.26 F. Alexandre, N. P. Rougier, and T. Viéville. "A regularization process to implement self-organizing neuronal networks". In: *International Conference on Engineering and Mathematics.* 2006. `CN`

CI.27 J. Fix, J. Vitay, and N. Rougier. "A Computational Model of Spatial Memory Anticipation during Visual Search". In: *Anticipatory Behavior in Adaptive Learning Systems*. 2006. `CN`

CI.28 J. Vitay and N. P. Rougier. "Using Neural Dynamics to Switch Attention". In: *International Joint Conference on Neural Networtks*. 2005. `CN`

CI.29 J. Vitay, N. P. Rougier, and F. Alexandre. "Reducing connectivity by using cortical modular bands". In: *European Symposium on Artificial Neural Networks*. 2004. `CN`

CI.30 N. P. Rougier. "Hippocampal Auto-Associative Memory". In: *International Joint Conference on Neural Networtks*. 2001. `CN`

CI.31 N. P. Rougier and F. Alexandre. "A cerebral framework for integrating biologically plausible mechanisms in large connectionist models". In: *International Conference on Systems in Biology*. 2001. `CN`

CI.32 N. P. Rougier and F. Alexandre. "A Model of Hippocampal-Cortical Interaction Using a Synaptic Triad Mechanism". In: *The Nature of Hippocampal-Cortical Interaction: Theoretical and Experimental Perspectives*. 2000. `CN`

CI.33 N. P. Rougier and F. Alexandre. "Spatial Knowledge Transfer Between Models of Hippocampus and Associative Cortex". In: *International Joint Conference on Neural Networtks*. 1999. `CN`

CI.34 N. P. Rougier, H. Frezza-Buet, and F. Alexandre. "Neuronal mechanisms for sequence learning in behavioral modeling". In: *Neural, Symbolic, and Reinforcement Methods for Sequence Learning Workshop, Sixteenth International Joint Conference on Artificial Intelligence*. 1999. `CN`

Science Outreach

SO.1 N. P. Rougier. "Silicon soul: The vain dream of electronic immortality". In: *The Conversation (US)* (2016).

SO.2 N. P. Rougier. "Why you'll never be able to upload your brain to the cloud". In: *The Conversation (US)* (2016).

SO.3 N. P. Rougier. "3615 EULA". In: *Binaires* (2015).

SO.4 N. P. Rougier. "Esprit in silico : les vains espoirs de l'immortalité". In: *The Conversation (FR)* (2015).

SO.5 N. P. Rougier. "Faut-il avoir peur de l'intelligence artificielle ?" In: *Thinkovery #3* (2015).

SO.6 N. P. Rougier. "L'intelligence artificielle n'aura pas lieu". In: *Scilogs* (2015).

SO.7 N. P. Rougier. "L'intelligence artificielle, mythes et réalités". In: *Interstices* (2015).

SO.8 N. P. Rougier. "Pourquoi l'idée de télécharger son cerveau n'a pas de sens". In: *The Conversation (FR)* (2015).

SO.9 N. P. Rougier. *Une brève histoire de l'intelligence artificielle*. Pint of Science, Bordeaux, France. 2015.

SO.10 N. P. Rougier. "Outils et bibliothèques de visualisation". In: *High Performance Computing* (Nov. 2013).

SO.11 N. P. Rougier. "Percer les mystères du cerveau". In: *Interstices* (2013).

SO.12 N. P. Rougier. "Petite histoire de la cybercriminalité". In: *Journée pédagogique pour l'ISN* (2013).

SO.13 A. Rousseau, A. Darnaud, B. Goglin, C. Acharian, C. Leininger, C. Godin, C. Holik, C. Kirchner, D. Rives, E. Darquie, E. Kerrien, F. Neyret, F. Masseglia, F. Dufour, G. Berry, G. Dowek, H. Robak, H. Xypas, I. Illina, I. Gnaedig, J. Jongwane, J. Ehrel, L. Viennot, L. Guion, L. Calderan, L. Kovacic, M. Collin, M.-A. Enard, M.-H. Comte, M. Quinson, M. Olivi, M. Giraud, M. Dorémus, M. Ogouchi, M. Droin, N. Lacaux, N. P. Rougier, N. Roussel, P. Guitton, P. Peterlongo, R.-M. Cornus, S. Vandermeersch, S. Maheo, S. Lefebvre, S. Boldo, T. Viéville, V. Poirel, A. Chabreuil, A. Fischer, C. Farge, C. Vadel, I. Astic, J.-P. Dumont, L. Féjoz, P. Rambert, P. Paradinas, S. De Quatrebarbes, and S. Laurent. *Médiation Scientifique : une facette de nos métiers de la recherche*. Tech. rep. 2013.

SO.14 N. P. Rougier. "Mémoire vive". In: *Universcité #4* (2011).

Invited Talks

IV.1 *Reproducibility in Machine Learning*. ICML Workshop on Reproducibility, Stockholm, Sweden. July 2018.

IV.2 *We ReDo Science*. Bernstein PhD Symposium, Berlin, Germany. Sept. 2018.

IV.3 *Decision Making: who's in charge?* Lex Robotica, CNAM, Paris, France. 2017.

IV.4 *Noise and Decision.* Symposium on the Biology of Decision Making, Bordeaux, France. 2017.

IV.5 *Reproducible Science.* University of Reading, United Kingdom. 2017.

IV.6 *ReScience, one year after.* Open science, transparence et évaluation, Bordeaux, France. 2017.

IV.7 *Scientific publishing on GitHub.* Computational Neuroscience Conference, workshop on Emerging models in scientific communication, Antwerps, Belgium. 2017.

IV.8 *Open Science.* AdaWeek, Paris, France. 2016.

IV.9 *ReScience.* Loi Numérique, et après ?, Meudon, France. 2016.

IV.10 *ReScience, refaire la science.* Retour d'expériences sur la recherche reproductible, Orléans, France. 2016.

IV.11 *Two actors, one critic.* Robotique & Neurosciences, Bordeaux, France. 2016.

IV.12 *Distributed, Asynchronous, Numerical & Adaptive computing: from neurons to behavior.* Colloque du GDR BioComp, Saint Paul de Vence, France. 2015.

IV.13 *From neuron to behavior.* Neuropsychology through the lenses of computational modelling, Birmingham, United Kingdom. 2015.

IV.14 *On ne voit que ce que l'on regarde.* Unithé ou Café, INRIA Bordeaux, France. 2015.

IV.15 *Cortical plasticity.* Computational Neuroscience Network, Marseille, France. 2014.

IV.16 *Cortical plasticity, a computational approach.* 3rd International Conference on Neural Field Theory, Reading, United Kingdom. 2014.

IV.17 *Cortical plasticity: a neural field approach.* Approaching Cognition from the Computational Neuroscience perspective workshop, Bernstein Conference, Göttingen, Germany. 2014.

IV.18 *Where is my mind?* Forum des Sciences Cognitives, Paris, France. 2014.

IV.19 *We see only what we look at.* Cerveau et Informatique, Université Paul Sabatier, Toulouse, France. 2013.

IV.20 *Where is my mind?* La Robotique et le Vivant, Cergy Pontoise, France. 2013.

IV.21 *Dynamic Neural Fields.* Brain & Signals, Institut Elie Cartan, Nancy, France. 2012.

IV.22 *Models of Visual Attention.* Intelligence Artificielle Embarquée, Cergy Pontoise, France. 2011.

IV.23 *Architecture Cérébrale et Robotique Autonome.* Robots, Hybrides et Corps, Nancy, France. 2009.

IV.24 *Visual Attention.* Computational Vision Workshop, Marseille, France. 2008.

IV.25 *Some questions around consciousness.* Conceptual Neuroscience, European Institute Para Limes, Wageningen, Nehterlands. 2007.

IV.26 *Visual Attention.* Models of Language Evolution, Acquisition and Processing, Leuven, Belgium. 2007.

IV.27 *Computational Neurocience for Humanoïd robotics.* Japanese-French Frontiers of Science, Kanagawa, Japan. 2006.

IV.28 *Rules without symbols.* Computational Models of Active Maintenance in Prefrontal Cortex, Alicante, Spain. 2003.

IV.29 *Mémoire Déclarative.* Xèmes Journées Neurosciences et Sciences de l'Ingénieur, Munster, France. 2000.

Invited Lectures

IL.1 *Less is more.* Python Scientifique, La Rochelle, France. 2017.

IL.2 *An Introduction to Matplotlib.* Scipy, Austin,Texas, USA. 2016.

IL.3 *Computational Neuroscience: from Single Neuron to Population.* Electromagnetic Fields and the Nervous System: Biological Effects, Biophysical Mechanisms, Methods, and Medical Applications, Erice, Italy. 2016.

IL.4 *Modern scientific visualization.* Advanced Scientific Programming in Python, Reading, United Kingdom. 2016.

IL.5 *Advanced Neural Fields.* Computational Neuroscience Symposium, Prague, Czech Republic. 2015.

IL.6   *An Introduction to Matplotlib.* Euroscipy, Cambridge, United Kingdom. 2015.

IL.7   *Reinforcement Learning.* Latin-America Summer School in Computational Neuroscience, Valparaiso, Chile. 2014.

IL.8   *Scientific visualization challenge.* Prospectom, Grenoble, France. 2014.

IL.9   *An introduction to Matplotlib.* Euroscipy, Cambridge, United Kingdom. 2013.

IL.10   *Scientific visualization.* PRACE Winter School, Dublin, Ireland. 2013.

IL.11   *Visualisation Scientifique.* Journées du dévelopement, Massy-Palaiseau, France. 2013.

IL.12   *Embodied Cognition.* National Institute of Informatics, Tokyo, Japan. 2010.

IL.13   *Introduction to Neural Fields.* National Institute of Informatics, Tokyo, Japan. 2010.

IL.14   *Models of Visual Attention.* National Institute of Informatics, Tokyo, Japan. 2010.

IL.15   *Visual Attention.* National Institute of Informatics, Tokyo, Japan. 2010.

Online Tutorials

TU.1   N. P. Rougier. *100 Numpy exercises.* 2015.
        See https://github.com/rougier/numpy-100.

TU.2   N. P. Rougier. *Numpy Tutorial.* 2015.
        See https://github.com/rougier/numpy-tutorial.

TU.3   N. P. Rougier. *Matplotlib Tutorial.* 2014.
        See https://github.com/rougier/matplotlib-tutorial.