CURRICULUM VITAE

Ilya Prokin

b 1/3/1987 in Dzerzhinsk, gorki Region, USSR
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POSITION	Ph.D. candidate Project-Team BEAGLE, INRIA Rhône-Alpes LIRIS, Université de Lyon, UMR 5205 CNRS-INSA Antenne INRIA de La Doua, Batiment CEI-2 56 Blvd Niels Bohr, CS 52132 69603 Villeurbanne CEDEX, France
LANGUAGES	Russian (native), English (fluent), French (working knowledge).

EDUCATION

2013-present	Ph.D. Computational Neuroscience, INRIA Rhône-Alpes, Lyon, France.
2011-2013	M.Sc. Physics, N.I. Lobachevsky State University of Nizhny Novgorod, Nizhny Novgorod, Russian Federation. GPA: 4.625/5.
2007-2011	B.Sc. Radiophysics, the Faculty of Radiophysics at the N.I. Lobachevsky State University of Nizhny Novgorod, Nizhny Novgorod, Russian Federation. GPA: 4.1/5.

INTERNSHIPS

July-Aug. 2013	Research Volunteer, Semyanov Lab, RIKEN Brain Science Institute, Saitama, Japan.
2011-2013	Research Student, Lab. of Nonlinear Processes in Living Systems, Institute of Applied Physics of the Russian Academy of Sciences, Nizhny Novgorod, Russian Federation.
2009-2013	Research Student, Dept. of Neurodynamics and Neurobiology, Biological Faculty, N.I. Lobachevsky State University of Nizhny Novgorod, Nizhny Novgorod, Russian Federation.

ADDITIONAL CLASSES AND SCHOOLS

6-11 Apr. 2015	Advanced Lecture Course on Computational Systems Biology. INRIA, Aussois, France.
4-15 June 2012	Summer school in Computational Neuroscience: "White Nights of Computational Neuroscience: Neurotheory from cell to cognition". Saint-Petersburg State University, Saint-Petersburg, Russian Federation.
29 Feb.-6 Mar. 2012	XVI Scientific school "Nonlinear Waves", Fundamental and applied problems of nonlinear physics. Institute of Applied Physics of the Russian Academy of Sciences, Nizhny Novgorod, Russian Federation.

3-7 Oct. 2011	International school "Towards neuromorphic intelligence: experiments, models and technologies". N.I. Lobachevsky State University of Nizhny Novgorod, Nizhny Novgorod, Russian Federation.
14-17 Sept. 2011	Modular course "Background techniques for Neurophysics: dynamical system theory, statistical physics, wavelet analysis". Saint-Petersburg State University, Saint-Petersburg, Russian Federation.
7-9 Apr. 2011	Modular course "Cellular mechanisms of information transfer: neuronal and synaptic plasticity". Saint-Petersburg State University, Saint-Petersburg, Russian Federation.

AWARDS

Apr. 2013	The best graduate award for research achievements, N.I. Lobachevsky State University of Nizhny Novgorod.
Jan.-June 2013	The Dynasty Foundation scholarship. one of 40 winners of 149 applicants. http://www.dynastyfdn.com/english/.
July-Dec. 2012	Additional scholarship for research achievements, given to 12 students who excell in scientific research (out of about 250 students), N.I. Lobachevsky State University of Nizhny Novgorod.
15 May 2012	Award for one of the best talks in the Theory of Oscillations section, one winner of 14 presenters, 16th Scientific conference on Radiophysics, N.I. Lobachevsky State University of Nizhny Novgorod.
Jan.-June 2012	Additional scholarship for research achievements, given to 14 students who excell in scientific research (out of about 250 students), N.I. Lobachevsky State University of Nizhny Novgorod.

SKILLS

OS	GNU/Linux, OS X, Windows.
Programming	Python (Scientific Packages: SciPy, NumPy, PANDAS, PyGMO, PyDSTool, etc), Fortran 90/95, C/C++, bash.
Technologies	git, make, HTML, CSS, LaTeX.
Other software	MATLAB/Octave, Basic knowledge of XPPAUT, NEURON, GENESIS, NEST, LabView.

RESEARCH INTERESTS

Current project	Computational Neuroscience, Synaptic Plasticity, Signal Transduction.
General	Machine Learning, Nonlinear Dynamics, Network Theory, Complex Systems, Memory, Motivation, Consciousness, Behavior.

TALKS

30 Oct. 2015	"Mechanistic Modeling of Spike-Timing Dependent Plasticity of Basal Ganglia Neurons", University of Chicago, Chicago, United States of America.
16 July 2012	"Detection of multiple spike transmission pathways in neuronal networks based on multichannel recordings".

	Institute for Theoretical Biology, Humboldt-Universität zu Berlin, Berlin, Germany.
4 June 2012	Introductory lecture to Lyle Graham lecture at the summer school in Computational Neuroscience "White Nights of Computational Neuroscience: Neurotheory from cell to cognition 2012". Saint-Petersburg State University, Saint-Petersburg, Russian Federation.

PUBLICATIONS

- **Prokin** I, Kazantsev V. Analysis of pulsed-signal transmission in a system of interacting neural oscillators with frequency-dependent Radiophysics and Quantum Electronics. Springer US; 2012;54: 763–772.

- **Prokin** I, Kazantsev V. Synchronization in the system of synaptically coupled neural oscillators with frequency-dependent coupling. Radiophysics and Quantum Electronics. Springer US; 2015;57: 745–758.

- **Prokin** I, Tyukin I, Kazantsev V. Phase selective oscillations in two noise driven synaptically coupled spiking neurons. International Journal Bifurcation and Chaos. World Scientific Publishing Company; 2015;25: 1540005.

- Cui Y, **Prokin** I, Xu H, Delord B, Genet S, Venance L, et al. Endocannabinoid dynamics gate spike-timing dependent depression and potentiation. eLife. eLife Sciences Publications Limited; 2016;5: e13185.

- Xu H, Perez S, Detraux B, Cornil A, **Prokin** I, Cui Y, et al. Endocannabinoid-dopamine interactions mediate spike-timing dependent potentiation in the striatum. Nature Communications. Nature Publishing Group; submitted, 2016.

COMMUNICATIONS

- **Prokin** I, Valtcheva S, Venance L, Berry H. Mechanistic modeling of spike-timing dependent plasticity of basal ganglia neurons. Neuroscience Chicago, United States of America: Society for Neuroscience; 2015.

- **Prokin** I, Cui Y, Valtcheva S, Venance L, Berry H. Modeling spike-timing dependent plasticity of basal ganglia neurons and its bidirectional control by endocannabinoid signaling. Advanced lecture course on computational systems biology. Aussois, France; 2015.

- **Prokin** I, Gladkov A, Mukhina I, Kazantsev V. Detection of multiple spike transmission pathways in neuronal networks based on multichannel recordings. 8th Int Meeting on Substrate-Integrated Microelectrodes. Reutlingen, Germany: NMI Natural; Medical Sciences Institute at the University of Tubingen; 2012. pp. 226–227.

- **Prokin** I, Kazantsev V. Identifying functional connectivity multigraph in the time maps networks by the sample of multidimensional point Proceedings of the 16th scientific conference on radiophysics. Nizhny Novgorod, Russia: N.I. Lobachevsky State University of Nizhny Novgorod; 2012.