

SERGEY SHUVAEV

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[linkedin.com/in/sergey-a-shuvaev](https://www.linkedin.com/in/sergey-a-shuvaev)

Ph.D. in applied mathematics and physics with a focus on computer science and neuroscience
Academic experience in applying machine-learning methods to modeling behavioral and neural data

Experience

Postdoctoral Fellow 11/22-now, **Research Assistant** 7/21-10/22, **Student in Residence** 7/16-6/21,
Koulakov Lab, Cold Spring Harbor Laboratory, Cold Spring Harbor, NY

- Developed data-driven models of decision-making for stay-or-leave decisions ([NeurIPS '20](#)), motivation ([Front Sys Neurosci '21](#)), and social conflict ([arXiv '23](#))
- Co-developed approaches to network compression ([bioRxiv '21](#)) and self-assembly ([PNAS '19](#))
- Analyzed olfactory system: function of receptors ([ICML '19](#)) and role of connectivity ([bioRxiv '23](#))

Research Assistant 7/16-12/18, **Research Technician** 1/12-6/16,
Enikolopov Lab, Moscow Institute of Physics and Technology, Moscow, Russia

- Developed automatic procedures to analyze cell populations in whole-brain samples: microscopy ([MethodsX '19](#)), brain alignment ([Sci Reports '22](#)), and cell detection ([Front Neuroanat '17](#))
- Performed microscopy and analyzed data to evaluate common impacts on adult neurogenesis: irradiation ([NeuroReport '19](#)); antidepressants, brain development, and cell migration

Research Technician 8/13-7/15, *Superconductivity Department*, Kurchatov Institute, Moscow, Russia

- Developed numerical models and worked towards experimental measurements of electro- and thermodynamics in high-current superconductive cables to pursue requirement-based design

Education

Ph.D., Physics and Mathematics (Biophysics), Moscow Institute of Physics and Technology, 2022
M.S., Applied Mathematics and Physics, Moscow Institute of Physics and Technology, 2015, GPA 4.0
B.S., Applied Mathematics and Physics, Moscow Institute of Physics and Technology, 2013, GPA 4.0

Publications

- 10+ publications, 100+ citations | scholar.google.com/citations?user=A2rXeeQAAAAJ
- 5 first-authored papers (incl. [NeurIPS](#) and [PNAS](#)); 3 co-authored papers (incl. [ICML](#)); 4 preprints

Professional service

Reviewer for [NeurIPS](#), [ICLR](#), [ICML](#), [COSYNE](#)

Skills and qualifications

- Python, PyTorch, TensorFlow, Matlab, Mathematica, C, C++, git, shell, LaTeX
- Deep learning, computer vision, Bayesian statistics, sequence modeling, reinforcement learning

Awards

- Highlighted Reviewer: [ICLR](#), 2022; [NeurIPS](#), 2022. *Awarded to top-5%/top-10% reviewers*
- Travel awards: CSHL; Gatsby Charitable, Burroughs Wellcome, Google DeepMind, Simons, 2020
- Swartz Fellow in Computational Neuroscience, 2016-2017. *\$100k+/2yrs toward salary and travel*
- Alexandrov Scholar, 2012-2015. *Awarded to students with recent conference records & top-tier GPA*
- Abramov and Frolov Scholar, 2010-2012. *Awarded to undergraduate students with the 4.0 GPA*
- Kurchatov Award for Outstanding Research, 2013

June 2023