

# Marina DUBOVA

## PERSONAL DATA

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PLACE AND DATE OF BIRTH: Saint Petersburg, Russia | 13 May 1997  
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GITHUB: [marinadubova](https://github.com/marinadubova)

## EDUCATION

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2015 — 2019 Bachelor in **PSYCHOLOGY**, **Saint Petersburg State University**, Russia  
CURRENT GPA: -/5.0

SPRING 2018 Exchange Student at **Peking University**, China

FALL 2018 Exchange Student at **University of Helsinki**, Finland

## PUBLICATIONS

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1. Karpov, A., Ivanchei, I., & Dubova, M. (in progress). Computational Modeling of Categorization: Review [In Russian]
2. Dubova, M., Moskvichev, A. (in progress). Bayesian Account on Adaptation Aftereffects and Set Illusion.
3. Belyy, A., Dubova, M., & Nekrasov, D. (2018). Improved Evaluation Framework for Complex Plagiarism Detection. In Proceedings of the 56th Annual Meeting of the Association for Computational Linguistics (Volume 2: Short Papers) (Vol. 2, pp. 157-162).
4. Belyy, A. & Dubova, M. (2018). Framework for Russian Plagiarism Detection Using Sentence Embedding Similarity and Negative Sampling. Computational Linguistics and Intellectual Technologies: papers from the Annual international conference “Dialogue” (pp. 96-109).
5. Dubova, M. & Moskvichev, A. (2018). Illusions of Set as Categorical Perception [In Russian]. In Proceedings of Russian Conference on Cognitive Psychology (pp. 27-37). Russian Psychological Society
6. Moskvichev, A., Dubova, M., Menshov, S., & Filchenkov, A. (2017). Using Linguistic Activity in Social Networks to Predict and Interpret Dark Psychological Traits. In Conference on Artificial Intelligence and Natural Language (pp. 16-26). Springer, Cham.

## PRESENTATIONS

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- Poster 56th Annual Meeting of the Association for Computational Linguistics 2018:  
Belyy, A., Dubova, M., & Nekrasov, D. Improved Evaluation Framework for Complex Plagiarism Detection.
- Oral Russian Conference on Cognitive Psychology:  
Dubova, M. & Moskvichev, A. Illusions of Set as Categorical Perception [In Russian].
- Oral Conference on Artificial Intelligence and Natural Language:  
Moskvichev, A., Dubova, M., Menshov, S., & Filchenkov, A. Using Linguistic Activity in Social Networks to Predict and Interpret Dark Psychological Traits.

## HONORS & AWARDS

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- 2015 - now **Scholarship**, Competitive Merit-Based Scholarship (5% of students)  
by Saint Petersburg State University
- 2018 **Scholarship** by University of Helsinki
- 2018 **Scholarship** by Peking University
- 2018 **Travel Grant**, Summer School Series on Methods for Computational  
Social Science
- 2017 **Winner**, International Hackathon on Russian Paraphrased Plagiarism Detection  
(at the Artificial Intelligence and Natural Language Annual Conference)
- 2017 **Prizewinner**, The "Sunset League" Nationwide Case-championship in Psychology  
(winner in category "Social Psychology")
- 2016 **Winner**, The "HackRussia" Nationwide Hackathon.  
The winning project – a data-driven violin & cello learning web application  
(with the innovative educational technology).
- 2016 **Winner**, The "Think Cognitive, Think Science" Nationwide Competition in Cognitive Sciences.  
Nomination: the best critical essay on a chosen paper in cognitive science.  
Chosen paper: *Soon, C. S., Brass, M., Heinze, H. J., & Haynes, J. D. (2008).*  
Unconscious determinants of free decisions in the human brain. *Nature Neuroscience*, 11(5), 543.
- 2016 **Prizewinner**, Russian Nationwide Debating Tournament
- 2015 **Prizewinner**, Russian Nationwide Olympiad in Biology
- 2015 **Prizewinner**, Russian Nationwide Olympiad in Russian Language

## LANGUAGES

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- NATIVE: Russian
- UPPER—INTERMEDIATE: English
- BASIC: French, German

## SKILLS

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- Programming: PYTHON, R, MATLAB,  $\text{\LaTeX}$
- Data Analysis: Bayesian, Frequentist
- Cognitive Science: Mathematical and Computational Modeling, Experimental Design, PSYCHOPY
- Soft Skills: Academic Writing (English, Russian), Presentation (Oral, Poster)
- Children Assessment: Preschool Language Scales, Mullen Scales Of Early Learning,  
Vineland Adaptive Behavior Scales

## INTERNSHIPS

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### Internship in the Laboratory of Translational Sciences of Early Childhood

1. Learned to assess children with particular methods (Preschool Language Scales, Mullen Scales Of Early Learning, Vineland Adaptive Behavior Scales)
2. Learned to conduct research with children participants (1 - 7 years old)
3. Tested children under supervision

## TEACHING

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2019   Moscow (in progress)	Educational Program (5 days): <a href="#">Bayesian Data Analysis</a> Russian Interdisciplinary Summer School Co-organizer: George Moroz
2018   Moscow	Lecture: <a href="#">Bayesian Data Analysis</a> Russian Interdisciplinary Summer School ("Advanced Data Analysis in Social Sciences")
2018   Moscow	Lecture: <i>Modeling in Cognitive and Neuroscience: Bayesian, PDP, Dynamical Systems</i> Russian Interdisciplinary Summer School ("Cognitive Science")
2015-2016	Tutoring in Biology
2015-2016	Tutoring in Mathematics
2015-2016	Tutoring in Chemistry
2015-2016	Tutoring in Russian Language

## VOLUNTEERING

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### [Think Cognitive Think Science](#) (Russian Community of Cognitive Scientists)

1. Compiling [weekly digests](#) of news and useful materials in Cognitive Science and Neuroscience with brief descriptions in Russian (2 years, more than 70 digests for [3000+ subscribers!](#))
2. Sending [Weekly Newsletter](#) for the Community
3. Helped to organize the [Autumn School on Soft Skills in Cognitive Science](#) (2017)

### Bioinformatics Institute, "[Neural Networks](#)" online course (teaching assistant)

1. Checking lecture videos
2. Testing problem sets and quizzes
3. Responding to comments

## WORKSHOPS

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2018   Saint-Petersburg	SPSU Winter Psychology School, specialization: " <i>Clinical Neuroscience</i> "
2017   Potsdam	The First Summer School on Statistical Methods for Linguistics and Psychology Stream: <i>Bayesian Data Analysis</i>
2017   Saint-Petersburg	The New York-St.Petersburg Institute of Linguistics, Cognition and Culture. Courses: <ol style="list-style-type: none"><li>1. <i>The Structure of Human Language: An Introduction to Generative Syntax</i></li><li>2. <i>Introduction to Formal Semantics</i></li><li>3. <i>Language, Mind and Modularity</i></li><li>4. <i>Conversations on Consciousness</i></li><li>5. <i>Resolving Ambiguities: Studies Across Cognition</i></li></ol>
2017   Moscow	Russian Interdisciplinary Summer School: " <i>Advanced Data Analysis in R</i> "
2017   Moscow	International Summer School " <i>Interdisciplinary Approaches to the Study of Educationally Relevant Psychological Traits</i> "
2017   Saint-Petersburg	SPSU Winter Psychology School, specialization: " <i>Data Analysis in Psychology</i> "
2016   Saint-Petersburg	SPSU Winter Psychology School, specialization: " <i>Experimental Cognitive Psychology</i> "
2016   Moscow	Russian Interdisciplinary Summer School: " <i>Data Analysis in Psychology</i> "

## SELECTED PROJECTS

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2018, individual For the "Mathematical Modeling in Life Sciences" course (PKU)	<i>Mathematical Modeling of Tristable Perception:</i> implemented neural models of perceptual rivalry, adapted them for the tristable case, analyzed and compared the predictions of adaptation- and noise-based models. <i>MATLAB</i>
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2018, individual For the "Empirical Methods in Natural Language Processing" course (PKU)	<i>Semantic Parsing-based Question Answering:</i> implemented the Probabilistic Combinatorial Grammars approach to convert natural language questions into lambda-calculus forms (from scratch). <i>Python</i>
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2018, individual For the "Empirical Methods in Natural Language Processing" course (PKU)	<i>Chinese Semantic Role Labeling:</i> Implemented a multilayer perceptron model to account for the imbalanced Chinese SRL task (from scratch) <i>Python</i>
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2017, supervisor: supervisor: A.Moskvichev	<i>Set Effects as Categorical Perception:</i> Designed and conducted two replicational experiments, analyzed the data, designed a model accounting set illusions from the perspective of categorical perception. <i>R</i>
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## ADDITIONAL EDUCATION

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2013-2014 Saint Petersburg	<b>Center of Ecological and Biological Education</b> Courses: 1. <i>General Biology</i> 2. <i>Genetics</i> 3. <i>Biochemistry</i>
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## ONLINE EDUCATION

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Massachusetts Institute of Technology	<i>Introduction to Probability - The Science of Uncertainty</i> <i>Introduction to Computer Science and Programming Using Python</i> <i>Computational Thinking</i>
Bioinformatics Institute	<i>Neural Networks</i> <i>Programming in Python</i> <i>Basics of Statistics</i>
Duke University	<i>Medical Neuroscience</i>
Ohio State University	<i>Calculus One</i>
National Institutes of Health	<i>Protecting Human Research Participants</i>
National Center for Professional & Research Ethics and NSF	<i>Responsible Conduct of Research</i>

## HOBBIES

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| 2003-now | <b>Music: Cello, Piano, Singing</b><br>Musical School (3 years), specialization: "Cello"<br>Musical School (8 years), specialization: "Choir Conducting" |
| 2016-now | <b>Parliamentary Debates</b>   |