## Victoria (Viktoriia\*) Firsanova

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Saint Petersburg, Russia (born in Tula, Tula Oblast, Russia)
\*In papers and everywhere else, I spell my name as "Victoria", but in official documents it is spelled as "Viktoriia"

#### Research interests

Conversational Artificial Intelligence, Machine Translation, Natural Language Understanding, Natural Language Generation, Transfer Learning

## **Projects**

#### 2020 - Present

### Autism Spectrum Disorder Question Answering (ASD-QA)

The dataset for Closed-domain Question Answering in Russian include question-answer pairs about Autism Spectrum Disorder and inclusive education. The dataset can be used to build dialogue systems such as chatbots and extractive question answering models. Project web site: asd-qa.org

#### 2022 - Present

### **Empathic Machine Processors for Inclusion (EMPI)**

The development of a mobile app for supporting the inclusion of people with Autism Spectrum Disorder and their families.

Source code, layouts, supporting material: GitHub

#### 2023 - Present

#### The Black Box podcast

Podcast about Artificial Intelligence and Natural Language Processing and series of popular science lectures in Russian.

Public page: VK

### Education

#### 2022 - Present

### Saint Petersburg State University - Saint Petersburg, Russia

PhD in Philology; Theoretical, Applied and Comparative linguistics

Dissertation: Neural Transfer Learning for Natural Language Processing in for Tasks in

Social Sector

Dissertation Advisor: Mitrofanova O. A., PhD, Associate Professor.

2020 - 2022Saint Petersburg State University – Saint Petersburg, Russia MA in Philology: Computer and Applied Linguistics Concentrations: Machine Learning, Linguistics Thesis: Approaches to Building a Dialogue System on Autism Spectrum Disorder with Transformer Architecture Thesis Advisor: Mitrenina O. V., PhD, Associate Professor. 2016 - 2020Higher School of Economics – Saint Petersburg, Russia BA in Philology Concentrations: Linguistics Thesis: Classification of Messages of Drug Addicts in Social Networks Using Neural Networks Thesis Advisor: Mitrenina O. V., PhD, Associate Professor. **Professional Development** Jan 2022 TU Berlin Winter University - TU Berlin, Online Course "Introduction to Artificial Intelligence" Dec 2021 Professional Development Courses – ITMO University, Saint Petersburg, Russia Course "Commercialization of Smart Digital Objects" Oct 2021 Tomsk State University, The Vladimir Potanin Foundation - Online Course "Stress Management" Oct 2021 **Tomsk State University, The Vladimir Potanin Foundation** – Online Course "Conflict Management" Sep 2021 **Tomsk State University, The Vladimir Potanin Foundation** – Online Course "Design Thinking" Jul 2021 **The Vladimir Potanin Foundation Summer School** – Online Tracks "Pro-Bono", "Agile", "Networking" Apr 2021 **DeepLearning.AI** – Coursera, Online Course "Natural Language Processing with Attention Models" Mar 2021 University of California, Santa Cruz – Coursera, Online Course "Bayesian Statistics: From Concept to Data Analysis"

Moscow Institute of Physics and Technology, Huawei – Stepik, Online

Course "Huawei: Natural Language Processing"

Jan 2021

Aug 2020	Summer School of Machine Learning (SMILES) – Skoltech, Online
Jul 2020	IBM – Coursera, Online Course "IBM: Introduction to Artificial Intelligence (AI)"
Sep 2019	<b>Fall School for Formal Syntax and Formal Semantics (3-FS)</b> – Higher School of Economics, Moscow, Russia
	Honors and scholarships
Dec, 2022	Literature Prize Nominee  Author of a short novel
Dec, 2022	Literature Open-Call Participant  Author of short read stories
Oct, 2021	Winner of the Vladimir Potanin Foundation Competition "Practices of Personal Philanthropy and Altruism" (Vladimir Potanin Foundation)  The project "The Development of the Informational Chat-bot about Autism Spectrum Disorder" was supported by funding provided by the Competition Organizers.
Aug, 2021	Winner of the Vladimir Potanin Foundation Summer School Competition Vladimir Potanin Foundation Summer School Competition (Vladimir Potanin Foundation)  The charity project "Accompanied Growing up for Mentally Disabled People" launched by an NGO.
Feb, 2020	The Vladimir Potanin Foundation Scholarship (Vladimir Potanin Foundation)
Dec, 2020	ODS Awards (Open Data Science) Winner in two nominations: Best Project, Best Organizer.
	Publications
May, 2022	A Quick Guide to Low-Resource NLP Firsanova, V. MLOps Community. May, 2022, online.
Feb, 2022	Question Answering Systems and Inclusion: Pros and Cons Firsanova, V.
	Internet and Modern Society 2021: Proceedings of the International Conference "Internet and Modern Society" (IMS-2021), St. Petersburg, Russia 23-26 June 2021. (CEUR Work-

 $shop\ Proceedings;\ Vol.\ 3090).\ RWTH\ Aahen\ University.\ http://ceur-ws.org/Vol-3090/.$ 

## Jan, 2022 Transformer Models for Question Answering on Autism Spectrum Disorder QA Dataset

Firsanova, V.

In D. A. Alexandrov, A. V. Chugunov, Y. Kabanov, O. Koltsova, I. Musabirov, S. Pashakhin, A. V. Boukhanovsky, & A. V. Chugunov (Red.), Digital Transformation and Global Society - 6th International Conference, DTGS 2021, Revised Selected Papers: 6th International Conference, DTGS 2021, St. Petersburg, Russia, June 23–25, 2021 (pp. 122-133). (Communications in Computer and Information Science; Vol 1503 CCIS). Springer Nature. DOI: 10.1007/978-3-030-93715-7-9.

# Dec, 2021 **Two Approaches to Building Dialogue Systems for People on the Spectrum** Firsanova, V.

Conference on Neural Information Processing Systems 2021. Data-Centric AI Workshop.

# Dec, 2021 The Advantages of Human Evaluation of Sociomedical Question Answering Systems

Firsanova, V.

International Journal of Open Information Technologies, 9(12), 53-59.

# Jun, 2021 The Description of the Autism Spectrum Disorder Question Answering Dataset

Firsanova, V.

Dialogue 2021 Student Session.

# Jan, 2021 Supporting the Inclusion of People with Asperger Syndrome: Building a Customizable Chatbot with Transfer Learning

Firsanova, V.

AINL: Artificial Intelligence and Natural Language Conference. Workshop on Human-AI Interaction. 7.-9.10.2020, online.

## Jan, 2021 Automatic Recognition of Messages from Virtual Communities of Drug Addicts

Firsanova, V.

*Journal of applied linguistics and lexicography, 2 (1), 16-27.* 

#### Jul, 2020 The Functioning of Drug Addict's Jargon in Social Networks

Firsanova, V.

Studia Slavica XVIII. — 04.07.2020. — P. 152—164. ISSN 2674-2160.

## Jul, 2020 The Classification of Drug Addicts' Messages in Social Networks with Neural Networks

Firsanova, V.

Dialogue 2020 Student Session.

### Conferences

## Mar 2023 51st L.A. Verbitskaya International Scientific Philological Conference (IPC 2023)

Applied and computational linguistics

The Development of a Chatbot about Autism Spectrum Disorders

#### Mar 2023 OpenTalks.AI 2023

**Poster Presentation** 

The Development of an AI-Powered Chatbot for Inclusive Education

### Dec 2021 Conference on Neural Information Processing Systems

Data-Centric AI Workshop

Two Approaches to Building Dialogue Systems for People on the Spectrum

# Jul 2021 TRITON 2021: Forum for recent advances in technologies for translation and interpreting and more

**Brainstorming Session** 

Karelian Machine Translation

#### Jun 2021 Internet and Modern Society - IMS

International Workshop "Computational Linguistics"

Question Answering Systems and Inclusion: Pros and Cons

# Jun 2021 6th International Conference Digital Transformation & Global Society (DTGS 2021)

Communications in Computer and Information Science

Transformer Models for Question Answering on Autism Spectrum Disorder QA Dataset

# Jun 2021 **Dialogue International Conference on Computational Linguistics and Intel- lectual Technologies**

Student session

Autism Spectrum Disorder Question Answering Dataset

#### Oct 2020 AINL: Artificial Intelligence and Natural Language Conference 2020

Human-AI Interaction Workshop

Supporting the Inclusion of People with Asperger Syndrome: Building a Customizable Chatbot with Transfer Learning

## Jun 2020 Dialogue International Conference on Computational Linguistics and Intellectual Technologies

Student session

The classification of drug addicts' messages in social networks with neural networks

#### Feb 2019 XX International Conference of Young Slavists

Language. Text. Society

The Functioning of Drug Addict's Slang in Social Networks

## Industry experience

#### Autumn 2021 Speech Technology Center (Internship) – Saint Petersburg, Russia

Project Management Department, Dialogue System Integration

#### Talks and tutorials

### Aug 2022 My First Crowdsourcing

Lecture on Information Technology, OLYMP Union, ITMO University, Saint Petersburg, Russia, available on YouTube

#### Oct 2021 Transformers

Seminar on Computational Linguistics, Saint Petersburg State University, Saint Petersburg, Russia, available on YouTube

#### Jun 2021 Evolution of Chat-bots

Lecture on Computational Linguistics, OLYMP Union, ITMO University, Saint Petersburg, Russia, available on YouTube

## Mentorship and service

#### Nov 2022 - Dec Corpora 2023 International Conference at St. Petersburg State University

2022 (Organizing Committee manager)

Translation, mailing, typesetting, editing, technical support.

#### Apr 2022 XXV Open Conference for Philology Students at St. Petersburg State Univer-

sity (Co-organizer of the section "Psycholinguistics")

Conference holding, review and selection of applications.

### Feb 2022 - Jun Non-governmental organization for children and parents of children with

2022 mental disability, Irkutsk, Russia (Website Developer)

Website development.

#### Sep 2021 - Jun Non-governmental organization of care for people with mental disability,

2022 Irkutsk, Russia (Project Manager)

Development and maintenance of a project to update the organization's website.

Jan 2021 – Jul	Corpora 2021 International Conference at St. Petersburg State University
2021	(Organizing Committee manager)
	Translation, mailing, typesetting, editing, technical support.
Jan 2021 – Jul	Internet and Modern Society (IMS-2021) International Conference at ITMO
2021	University (Organizing Committee manager)
	Translation.
Sep 2020 – Dec	OLYMP Union at ITMO University (Active member and NLP Discussion Club
2020	organizer)
	Creator and organizer of a student discussion club.

### Technical skills

## Programming and markup languages

Proficient in: Python, HTML, CSS, XML

Familiar with: JavaScript

### **Software**

⊮TEX, Git, Jupiter

### Languages

English (IELTS Certificate 7.5 C1 Advanced), German (Upper-Intermediate), Spanish (Intermediate), French (Intermediate), Italian (Elementary), Russian (Native)

## Other interests

Ancient languages, computer vision, charity, ecology, fine arts.