

SUMMARY _

I am an expert in data science, machine learning, natural language processing and software development. My skills include data analysis, training ML and DL models, designing and writing efficient code, team leading. Also I teach a lot and like to be a public speaker.

EDUCATION. MOSCOW STATE UNIVERSITY (CMC) / FRC IM OF THE RUSSIAN ACADEMY OF SCIENCES 2017-2020 Ph.D IN COMPUTER SCIENCE Effective Implementation of Topic Modeling Algorithms with Additive Regularization MOSCOW STATE UNIVERSITY (CMC) 2015-2017 MASTER OF APPLIED MATHEMATICS AND COMPUTER SCIENCE MOSCOW STATE UNIVERSITY (CMC) 2011-2015 BACHELOR OF APPLIED MATHEMATICS AND COMPUTER SCIENCE

WORK EXPERIENCE AND PROJECTS _____

TALKMART42

DATA SCIENTIST (CO-FOUNDER)

- Prototype of voice control system for self-service checkout for retail company (Python / NLP)
- English neural QA-system for specific domain for advertising agency (Python / NLP)
- Advertisements classification system for advertising and media research company (Python / NLP)
- Voice games for Yandex Alice and Sber Salut (Python)
- Voice and visual business apps in Sber Salut (TypeScript / Python)

JUST AI

NLP R&D TEAM LEADER

 NLP core of cloud text processing engine for internal products and external marketplace (Team leading / Project managment / NLP / Python)

ALFA BANK

DATA SCIENTIST (LEAD)

- ML and DL models for chat-bot intent detection (Python / NLP)
- Project managment of several NLP tasks with reporting to senior officials (Team leading / Project managment)

DIGITAL DECISIONS (AITHEA)

NLP TEAM LEADER / DATA SCIENTIST (SENIOR)

- Spell checker for government organization (C++ / Python / NLP)
- English NER in application onboarding for B2C startup (Project managment)
- Search and recommender system for English scientific articles (Project managment / Team leading)
- Trend detection in Twitter and YouTube data for Instinct BBDO (Python / NLP / Team leading)
- · Collecting NLP-data for Huawei voice assistant (Python / NLP / Team leading)
- Tickets ordering chatbot for B2C company (NLP / Team leading / Project managment)

YANDEX ZEN

ML-ENGINEER (MIDDLE)

- System for evergreen content detection within Zen recsys (Java / Python / SQL / ML)
- System for one-day/yellow/black content classification within Zen recsys (Java / Python / NLP)
- Zen recsys channel catalog ranking system (Java / SQL)
- Zen recsys fresh content usage strategies algorithms (Java / SQL)

YANDEX SEARCH

SOFTWARE ENGINEER (JUNIOR)

• Yandex Search antirobot development (C++)

September 2017 - April 2019

April 2016 - September 2017

October 2021 - Now

April 2020 - Now

August 2021 - October 2021

April 2019 - April 2020

Computing Centre of Russian Academy of Sciences	July 2014 - April 2016
<u>SOFTWARE ENGINEER</u> BigARTM - open-source library for topic modeling (C++ / Python / NLP) 	
 Ethnic content exploration in social networks data (<i>Python / NLP</i>) 	
FREELANCE	
<u>DATA SCIENTIST</u> Clustering and sentiment analysis of bank employees reviews (<i>Python / NLP</i>) Retail data analysis and parsing for scientific nutritional project (<i>Python / NLP</i>) Development of recommender system for online food store (<i>Python</i>) 	
MAIN TEACHING EXPERIENCE	
ONLINE EDUCATION COMPANY NETOLOGY	2022
LECTURER OF NLP / DL, ML / RECSYS AND PYTHON COURSES	
Moscow Institute of Physics and Technology	2019-2022
Lecturer of Python Course	
HIGHER SCHOOL OF ECONOMICS	
Lecturer of NLP Online Course	
Moscow Institute of Physics and Technology / Moscow State University	2017-2022
Lecturer of NLP Course (earlier - Assistant)	
Yandex School of Data Analysis	2016-2019
Assistant in ML Course	
Higher School of Economics	2017-2018
Assistant in NLP Course	

SKILLS, MODELS, APPROACHES

PROGRAMMING LANGUAGES	<i>Experienced:</i> Python 2/3 C++11 <i>Familiar:</i> TypeScript Java SQL
SOFTWARE DEVELOPMENT	Algs and Data Structures OOP Patterns Multi-Threaded Programming MapReduce
GENERAL ML AND DS	Log/Linear Regression kNN RF GB PCA t-SNE K-means GMM DBSCAN
	SMOTE Time-Series Exp. Smoothing ARIMA A/B Tests Stat. Hypothesis Testing
NON-DEEP NLP	Text Preprocessing Regexes TF-IDF Word2vec GloVe FastText LDA ARTM
DEEP NLP	FFNN CNN GAN RNN (BiLSTM) Seq-to-seq (Attention) Transformer BERT
	RoBERTa ALBERT ERNIE DistilBERT XLM GPT-2 XLNet T5 BART
TECHNICAL SKILLS	Linux Terminal (Ubuntu) VC (Git, SVN) Unit Testing CI LaTex
SOFT/MANAGMENT SKILLS	Teaching Agile (Scrum, Kanban) Waterfall Fluent Speech (Russian)
LANGUAGES	Russian (Native) English (Intermediate)

TOOLS, LIBRARIES, FRAMEWORKS

SOFTWARE DEVELOPMENT	<i>Experienced:</i> STL Pyenv & Venv Pipenv Docker Redis Flask Google Protobuf
	<i>Familiar:</i> Hadoop PySpark MPI CUDA Cython Numba Android SDK (Java)
	QT React GDB CMake MongoDB Travis CI AWS
GENERAL ML	NumPy Pandas Sklearn Matplotlib SciPy XGBoost CatBoost Vowpal Wabbit
	Statsmodels Faiss ScaNN Jupyter Notebook Colab Yandex Toloka Doccano
NON-DEEP NLP	Re Pymorphy2/Pymystem3 NLTK SpaCy FastText Gensim BigARTM UDPipe
DEEP NLP	PyTorch Huggingface Sentence Transformers Haystack DrQA EasyNMT
VOICE ASSISTANTS, ASR/TTS	Yandex SpeechKit Vosk (Kaldi) Yandex Dialogs Google Actions RHVoice
MANAGMENT/OTHERS	Yandex Tracker Emacs MS Office Google Docs Overleaf Beamer

MAIN PUBLIC ACTIVITIES

- Alice Urban Skills Hackathon, 2021 (with team, 3rd place)
- VirusHack Hackathon, 2020 (with team, 1st place)
- DataStart Conference, 2020 (two paired speeches, Instinct BBDO and Huawei)

• OpenTalks.AI Conference, 2020 (paired speech, Huawei)

MAIN SCIENTIFIC PAPERS _

- Artemova E., Apishev M., Sarkisyan V., Aksenov S., Kirjanov D., Serikov O. Teaching a Massive Open Online Course on Natural Language Processing. NAACL Workshop, 2021
- Apishev M., Vorontsov K. Learning Topic Models With Arbitrary Loss. FRUCT, 2020
- Apishev M., Koltcov S., Koltsova O., Nikolenko S., Vorontsov K. Additive Regularization for Topic Modeling in Sociological Studies of User-Generated Texts. MICAI, 2016
- Frei O., Apishev M. Parallel Non-blocking Deterministic Algorithm for Online Topic Modeling. AIST, 2016
- Vorontsov K., Frei O., Apishev. M., Romov P., Suvorova M., Yanina A. Non-Bayesian Additive Regularization for Multimodal Topic Modeling of Large Collections. CIKM Workshop, 2015