

Alexander Smirnov

Amay 21, 1999

Russia, Saint Petersburg

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Languages

Russian





Working Experience

08.2020 – now 8 months **Recommender Systems Engineer**

IT Service, startup

JetBrains

Belkasoft

Researching, evaluating and ensembling different approaches for

builiding news & videos recommender systems.

Extracting training data from logs. Inventing new logs to collect. Solving probles such as cold start, data sparcity, instant users' actions influence on further recommendations.

Deploying solution to production using microservice architecture.

python recommender systems matrix factorization microservices high load clickhouse redis S3 mySQL

mongoDB flask docker gitlab CI k8s

Internships

09.2019 – Machine Learning Intern 12.2019 Predicting core properties

Predicting core properties (type, carbonate, ruin, saturation) using

4 months core samples images.

 $\label{lem:decomposition} \mbox{Deep learning was used to detect properties; zones were highlighted}$

using segmentaion algorithms.

research python tensorflow CV segmentation

07.2019 – Machine Learning Intern

08.2019 Collecting data and train algorithm to find pictures that contain cir-

2 months cles and arrows on them.

python tensorflow CV object detection C#

Education

Study

2017 – now **Bachelor Studies**

Saint Petersburg State University

Software and Administration of Information Systems, Department

of Information and Analytical Systems

Bachelor's Thesis Department of Information and Analytical Systems A hybrid approach for news recommender system using optimiza-

tion methods

Coursework Thesis Department of Information and Analytical Systems

Automatic core samples classification

2014 – 2017 **Secondary education**

Physics and Mathematics Lyceum No. 239

Best Physics and Mathematics Lyceum in Russia

Alexander Smirnov

Skills -

Linux

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- arch, i3
- vim, zsh
- Python
- $\bullet \bullet \bullet \circ$

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- scikit-learn, matplotlib
- nltk, gensim
- tensorflow
- surprise
- flask
- jupyter notebook
- Recommender Systems •
 - collaborative filtering
 - content-based filtering
 - session filtering
 - cold start
 - matrix factorization
- Machine Learning
 - supervised learning
 - clustering
 - dimensionality reduction
 - data visualization
 - EDA
- Development
 - gitlab, CI / CD
 - k8s
 - microservices
- **DBMS**
 - MySQL
 - MongoDB
 - ClickHouse
 - Redis
 - Amazon S3
 - Oracle
- Web Development
 - ▶ HTML, CSS, JS
 - JQ, AJAX, bootstrap
- .NET
 - ▶ C#
 - ▶ F#
- Multi-agent Systems •
- 👙 Java
 - android development
- C C++
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Education

Online courses

2021 - now	Finding Structure in Data	MIPT
	Clustering, matrix factorization, topic modelli and visualizations	ing, outliers searching
2020 – now	Introduction to Recommender Systems Non-Personalized and Content-Based recommender Non-Personalized and Content-Based recommender Non-Personalized and Content-Based recommender Non-Personalized and Content-Based recommender	University of Minnesota menders
2020 – now	Algorithms. Theory and Practice. Methods	Computer Science Center
2020	Algorithms introduction	computer colonice conten
2020 - now	Programming in C++	Computer Science Center
	Main concepts of C++	
2021	Training on Labeled Data	MIPT
	Supervised learning models: linear models, composition	decision trees, models
2020	Web Development for Beginners	ITC
	Basics of web development	
2019	Mathematics and Python for Data Analysis	MIPT
	Refresh mathematics knowledge applied in da	nta analysis and review
	python libraries that are related	
2019	Introduction to TensorFlow	deeplearning.ai
	Examples of how to work with TensorFlow lib	rary

Offline courses

2021	Forum on Mathematics and AI 5-day intensive forum filled with lectures on sota AI r	MIPT researches
2016	Student STAR Program-Russia CoE track Project management course	EMC
2015 – 2016	Samsung IT School Android development course	Samsung
Books		
2021	The Lean Startup Successful startup launching guideline	Eric Ries
2020	Linux Fundamentals Introduction to using Linux from the command line	Paul Cobbaut

Alexander Smirnov Projects

2020	Git Server My own private git server hosted on raspberry pi
2020	Tetris Terminal tetris game for *nix operating system
2019	Emoji Communicator Visualizing text with emoji letters
2019	Siamese Neural Networks Implementation of siamese network for one-shot learning task
2019	Classifying Browser Extension Browser extension that allows you to classify site if it is suitable for children to watch
2018 – 2019	Android Meme Application An android app that show memes depending on your preferences
2018 – 2019	Custom File Manager Illustrates a bunch of programming patterns and optimization techniques

Achievements

2019	2nd place	PhotoLab PhotoHack
2018	Finals	VK Hackathon

Hackathons

2021	MIPT Forum Hackaton Classifying quiz questions if they written by profes	Moscow sionals or not
2020	TrudHack 2 CV parser	Saint Petersburg
2019	Tender Hack.Spb Search algorithm	Saint Petersburg
2019	PhotoLab PhotoHack Program that help users to express themselves in	Veliky Novgorod chats
2019	QuantNet Trading algorithm	Saint Petersburg
2019	SPbU GameJam 2019 Game	Saint Petersburg
2018	VK Hackathon Entertaining app	Saint Petersburg