Alexander Smirnov

May 21, 1999

Russia, Saint Petersburg

SmirnovAlexander

ru.alexander.smirnov@gmail.com

@furiousteabag

+79119727982

Languages

Russian ●●●●●

English ●●●●○

Working Experience

08.2020 – now
8 months

Recommender Systems Engineer — IT Service, startup

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 – 12.2019
4 months

Machine Learning Intern — JetBrains

Predicting core properties (type, carbonate, ruin, saturation) using core samples images.
Deep learning was used to detect properties; zones were highlighted using segmentation algorithms.

research python tensorflow CV segmentation

07.2019 – 08.2019
2 months

Machine Learning Intern — Belkasoft

Collecting data and train algorithm to find pictures that contain circles 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 optimization 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
  - arch, i3
  - vim, zsh
- Python
  - 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++

Education

Online courses

2021 – now	**Unsupervised Learning** Clustering, matrix factorization, topic modelling, outliers searching and visualizations	MIPT
2020 – now	**Introduction to Recommender Systems** Non-Personalized and Content-Based recommenders	University of Minnesota
2020 – now	**Algorithms. Theory and Practice. Methods** Algorithms introduction	Computer Science Center
2020 – now	**Programming in C++** Main concepts of C++	Computer Science Center
2021	**Supervised Learning** Supervised learning models: linear models, decision trees, models composition	MIPT
2020	**Web Development for Beginners** Basics of web development	ITC
2019	**Mathematics and Python** Mathematics and python libraries applied in data analysis	MIPT
2019	**Introduction to TensorFlow** Examples of how to work with TensorFlow library	deeplearning.ai

Offline courses

2021	**Forum on Mathematics and AI** 5-day intensive forum filled with lectures on sota AI researches	MIPT
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** Moscow
Classifying quiz questions if they written by professionals or not

2020 **TrudHack 2** Saint Petersburg
CV parser

2019 **Tender Hack.Spb** Saint Petersburg
Search algorithm

2019 **PhotoLab PhotoHack** Veliky Novgorod
Program that help users to express themselves in chats

2019 **QuantNet** Saint Petersburg
Trading algorithm

2019 **SPbU GameJam 2019** Saint Petersburg
Game

2018 **VK Hackathon** Saint Petersburg
Entertaining app