# **Artyom Gadetsky**

Bayesian Methods Research Group, Moscow, Russia artygadetsky@yandex.ru • https://github.com/agadetsky • https://agadetsky.github.io • +7 (925) 326-70-02

## **EDUCATION**

# **National Research University Higher School of Economics**

Skolkovo Institute of Science and Technology

Moscow, Russia

M.S. in Statistical Learning Theory

2018 - Present

• Current GPA: 4.77 / 5

# **National Research University Higher School of Economics**

Moscow, Russia

■ B.S. in Computer Science, Machine Learning Major

2014 - 2018

Degree with honors

• GPA: 4.75 / 5

# WORK EXPERIENCE

# **Bayesian Methods Research Group**

Moscow, Russia

Supervisor: Dmitry Vetrov

2016 – Present

 Description: conducting research on deep learning and bayesian machine learning, particularly variance reduction techniques for discrete latent variables models where latents are permutations.

# Sberbank-HSE Laboratory

Moscow, Russia

Supervisor: Evgeny Sokolov

2017 – Present

· Description: conducting research on different tasks for Sberbank Russia

# RESEARCH EXPERIENCE

# **National Research University Higher School of Economics**

Moscow, Russia

• Topic: Variance reduction techniques for Plackett-Luce distribution

Present

• Supervisor: Dmitry Vetrov

 Description: Conducting research on causal inference and variance reduction techniques for discrete latent variable models with applications in structure learning of DAGs, TSP, ranking, etc.

# **National Research University Higher School of Economics**

Moscow, Russia

Topic: Conditional Generators of Words Definitions

Oct 2016 - Aug 2018

• Supervisor: Dmitry Vetrov

Description: Work proposes conditional language model for word's definitions.
 Conducted experiments show that one particular word embedding contains information about most meanings of the corresponding word and that particular components of word embeddings can be interpretable.

#### Graphics and Media Lab, Moscow State University

Moscow, Russia

Topic: Multiple Object Tracking

Jul 2016 – Aug 2016

• Supervisor: Anton Konushin

• Description: Research on application of CNNs for tracking people in the crowd

# **National Research University Higher School of Economics**

Moscow, Russia

■ Topic: 2D Scene Parsing with Generative Models

Dec 2015 - Jun 2016

• Supervisor: Anton Konushin

 Description: Application of CNN for object classification and object labeling to set of synthetic data

# **National Research University Higher School of Economics**

Moscow, Russia

Topic: Road Sign ClassificationSupervisor: Anton Konushin

Jul 2015 - Aug 2015

 Description: Achieved 98 % accuracy in multiclass road sign classification using HOG and SVM

#### **PUBLICATIONS**

## CONFERENCES

Low-variance Black-box Gradient Estimates for the Plackett-Luce Distribution (oral) Artyom Gadetsky, Kirill Struminsky, Chris Robinson, Novi Quadrianto, Dmitry Vetrov In proceedings of the 34th AAAI Conference on Artificial Intelligence (AAAI), 2020

Conditional Generators of Words Definitions (poster session)

Artyom Gadetsky, Ilya Yakubovsky, Dmitry Vetrov In proceedings of the 56th Annual Meeting of the Association for Computational Linguistics (ACL), 2018

Conditional Generators of Words Definitions (poster session)

Artyom Gadetsky, Ilya Yakubovsky, Dmitry Vetrov

Best Student Work at DIALOGUE 2018

Conditional Generators of Words Definitions (poster session)

Artyom Gadetsky, Ilya Yakubovsky, Dmitry Vetrov

Presented poster at AINL 2017

#### WORKSHOPS

Low-variance Gradient Estimates for the Plackett-Luce Distribution (spotlight) Artyom Gadetsky, Kirill Struminsky, Chris Robinson, Novi Quadrianto, Dmitry Vetrov In proceedings of the Bayesian Deep Learning NeurIPS 2019 Workshop

## **AWARDS**

- The Ilya Segalovich Scholarship 2019
  - Description: Winner
- Open HSE Student Research Paper Competition 2018

Description: Winner (3rd absolute place)

Increased State Academic Scholarship 2018

Description: Winner (receiving during autumn semester)

■ DIALOGUE 2018 conference

Description: Best Student Work for "Conditional Generators of Words Definitions"

# **NOMINATIONS**

■ The Ilya Segalovich Award 2019

Description: Finalist

• Silver Nestling Golden HSE Award 2018

Description: Finalist

■ The Ilya Segalovich Scholarship 2017

Description: Nominee

■ The Ilya Segalovich Scholarship 2016

Description: Nominee

## **HACKATHONS**

Microsoft Azure Machine Learning Hack

Description: Special award from Alfa Bank for clustering customers by their social statuses

• Kazan Big Data Summit Hack

Description: Prize winner for clustering Instagram profiles into commerce / non-commerce classes

## **TALKS**

DataFest 2018 (in russian)

Topic: Conditional Generators of Words Definitions

DIALOGUE 2018 (in russian)

Topic: Word Sense Induction and Definition Modeling

# OTHER EXPERIENCE

- Microsoft Research AI Summer School 2018
- Visiting scholar at the University of Sussex, UK, July-August 2019
  Description: hosted by Novi Quadrianto
- Visiting scholar at the University of Sussex, UK, November 2019
  Description: hosted by Novi Quadrianto

# **TEACHING**

 Continuous Optimization course at HSE and MSU Role: Teaching fellow

Present

■ Data Analysis course at HSE 2018 Role: Teaching fellow ■ DeepBayes 2019 Summer School Aug 2018 Role: Teaching assistant ■ DeepBayes 2018 Summer School Aug 2018 Role: Teaching assistant ■ DeepBayes 2017 Summer School Aug 2017 Role: Teaching assistant Coursera "Bayesian Methods in Machine Learning" course 2017-2018 Role: Teaching assistant "Bayesian Methods in Machine Learning" course at YSDA and CMC MSU 2017-2018 Role: Teaching assistant Machine Learning course at CS HSE Sep 2017 - Jul 2018 Role: Teaching assistant • Russian: Mother tongue. ■ English: Fluent Machine Learning, Deep Learning, Bayesian Machine Learning

**LANGUAGES** 

**SKILLS** 

• Python, Pytorch, Feel free with Linux