

# VADIM LIVENTSEV

## Machine Learning Engineer

@ hi@vadim.me

📍 Eindhoven, the Netherlands

🔗 vadim.me

🐙 github.com/vadim0x60

🔗 orcid.org/0000-0002-6670-6909

## INDUSTRIAL EXPERIENCE

### Visiting researcher

#### Philips Research Eindhoven

📅 Oct 2019 – Present

📍 Eindhoven, Netherlands

Applying my PhD research to Philips use cases

### Contractor

#### Red Kangaroo

📅 Oct 2019 – Jan 2020

📍 remote

Developing clinical data exchange for 21st century

### Associate Scientist

#### Philips Innovation Labs RUS

📅 Feb 2018 – Present

📍 Moscow, Russia

Developing named entity recognition with confidence levels in order to interpret medical records.

### Chief Technology Officer

#### BotEngine

📅 Jun 2017 – Dec 2017

📍 Moscow, Russia

A platform for development and deployment of chatbots.

As well as volunteer software development for *EVA Network* and internships at *Institute for System Programming of the Russian Academy of Science* and *Samsung Research and Development Center*

## ACADEMIC EXPERIENCE

### PhD in Deep Program Induction for Personal Health Services

#### Eindhoven University of Technology (TU/e)

📅 Oct 2019 – Present

### MSc in Data Science

#### Skolkovo Institute of Science and Technology (Skoltech)

📅 Sep 2017 – Jun 2019

### Bachelor of Software Engineering

#### Higher School of Economics (HSE)

📅 Sep 2013 – Aug 2017

### Concentration in Programming

#### Lyceum of Information Technologies (LIT)

📅 Sep 2009 – Jun 2013

As well as

- Antivirus School by Kaspersky Lab, 2011
- Developing embedded software for drones @ *IT Workshop Summer School*, 2013
- Foundations of Machine Learning. *Mehryar Mohri*, 2016
- Machine Learning Summer School *mlss2019.skoltech.ru*

<sup>0</sup>Internal conference at Philips Research

<sup>1</sup><https://medium.com/@liventsevvadim/the-promise-and-perils-of-sleeping-at-hackathons-25d577697a25>

<sup>2</sup><https://github.com/vadim0x60/IDNN-Replication-Study>

## PUBLICATIONS

- Deep Text Prior: Weakly Supervised Learning for Assertion Classification (ICANN 2019)
- Active Learning with Deep Pre-trained Models for Sequence Tagging of Clinical and Biomedical Texts (BIBM 2019)
- BF++: a language for general-purpose program synthesis
- Neurogenetic Programming Framework for Explainable Reinforcement Learning (GECCO 2021)
- Topic evolution modeling using *Ida2vec* (OCUPAI 2019<sup>1</sup>)
- Opening the Black Box of Deep Neural Networks with more information <sup>2</sup>

## SKILLS

- Strong mathematical background. Calculus, optimization, numerical linear algebra.
- Deep Learning: ConvNets, RNNs, Attention, GANs. Pytorch and Tensorflow.
- Statistics. Bayesian and Neurobayesian methods
- Natural Language Processing. Language Models, Information Extraction, Image Captioning.
- Efficient algorithms and data structures
- C, C++, C#, Java, Clojure, Python, JavaScript, bash, PHP :(
- x86 architecture: paging, stack, interrupts, assembly language
- Databases: Not-only-SQL.
- Project management methodologies. Scrum.
- Requirements management, e.g. developing user stories. Working with non-technical clients.
- Russian-English bilingual. Intermediate French.

## TEACHING

- Course author and instructor @ *Functional Programming with Clojure*. Skoltech 2018, 2019.
- Course author and instructor @ *Introduction to Artificial Humour*. Skoltech 2019.
- Course instructor, mentor @ *Machine Learning, Computer Vision, Project Management*. Netology 2019-2021.
- Mentor @ *Neurohackathon 2018*. Medical image segmentation for Multiple Sclerosis.

## HACKATHONS

- Junction. Helsinki 2018 & 2019
- HackUPC. Barcelona 2017
- The Room of the Future. Budapest 2018 🏆
- Microsoft ImagineCup Hackathon 2017