



# Nikita Kostin

Software Engineer

## Profile

Highly initiative and self-motivated middle software engineer and researcher with 3+ years of industry experience working as a software engineer in top tech companies.

## Employment History

### Research Scientist at Aalto University, Espoo, Finland

November 2021 — Present

Research in safe and robust reinforcement learning algorithms for robotics.

- Technology stack: Python, ROS, Docker, PyTorch,
- Keywords: reinforcement learning, Gaussian processes, Spot robot, adaptive control, vision-language models.
- Achievements: developed data-driven safe exploration algorithm for without any prior information (in preparation for publication).

### Machine Learning Engineer at Huawei Research Center, Moscow, Russia

September 2019 — October 2021

Research in deep learning algorithms for image enhancement and super-resolution.

- Technology stack: Python, TensorFlow, PyTorch, OpenCV, Git.
- Keywords: demosaicing, super-resolution, deblurring, normalizing flows, image segmentation.
- Achievements: improved quality of demosaicing using neural networks and developed a super-resolution algorithm based on Normalizing Flows.

### Intern Software Engineer at Samsung Research Russia, Moscow, Russia

December 2018 — September 2021

Developed AI-based Mobile Testing Automation for Android.

- Technology stack: Python, PyTorch, TensorFlow, Git.
- Achievements: developed a benchmark of environments for mobile testing automation using reinforcement learning.

### Intern Software engineer at Samsung Research Russia, Moscow, Russia

June 2018 — December 2018

Developed OpenStack system installation automation.

- Technology stack: Python, Bash, Git, OpenStack.
- Achievements: received an outstanding work certificate for contributing to the OVS-OpenStack system.

## Details

Espoo

Finland

+358 41 4960156

[nskostin96@gmail.com](mailto:nskostin96@gmail.com)

## Links

[Personal webpage](#)

[Linkedin](#)

[GitHub](#)

## Skills

Python

PyTorch

TensorFlow

C++

ROS

MATLAB

Git

Linux

Docker

LaTeX

## Languages

Russian

English

Swedish

German

## Hobbies

Cross-country skiing, chess, cycling, swimming, running, hiking

## 🎓 Education

### PhD in Electrical Engineering , Aalto University, Espoo, Finland

November 2021 — Present

- Key research topics: safe reinforcement learning, robotics,
- Courses: Reinforcement Learning, Deep Learning, Gaussian Processes, Filtering and Smoothing.
- Overall GPA: 4.52 / 5.

### M.Sc in Applied Mathematics, Lomonosov Moscow State University, Moscow, Russia

September 2018 — May 2020

- Courses: Optimal Control, Programming II, Calculus of Variations, Control Engineering.
- Overall GPA: 4.05 / 5

### B.Sc in Physics, Lomonosov Moscow State University, Moscow, Russia

September 2014 — May 2018

- Courses: Calculus, Linear Algebra, Programming I, Theoretical Mechanics, Thermodynamics, Electrodynamics, Optics, Quantum Mechanics, Group Theory.
- GPA: 4.51 / 5

## 📖 References

Aidan Scannell from Aalto University

[aidan.scannell@aalto.fi](mailto:aidan.scannell@aalto.fi)

Wenyan Yang from Aalto University

[wenyan.yang@aalto.fi](mailto:wenyan.yang@aalto.fi)

## ★ Social activities

Teaching Assistant at Nordic ProbAI, Helsinki, Finland

June 2022 — June 2022

Lead TA for Normalizing Flows section.

Teaching Assistant, Espoo, Finland

September 2022 — Present

Permanent TA on the Reinforcement Learning course.

International Workshop of Intelligent Autonomous Learning Systems 2023, Kleinwalsertal, Austria

August 2023 — August 2023

Organized by the Intelligent Autonomous Systems lab from TU Darmstadt.

Generative Modeling Summit, Belgrade, Serbia

September 2023 — September 2023

Organized by Yandex, covered YandexGPT.