

# Iakov Kaiumov

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## EDUCATION

### MOSCOW INSTITUTE OF PHYSICS AND TECHNOLOGY | BACHELOR IN APPLIED MATH AND PHYSICS

2018 - 2022 | Department of General and Applied Physics

#### COURSES:

- Mathematics: Calculus, Linear Algebra, Differential Equations, Complex Analysis, Partial Differential Equations
- Physics: Mechanics, Thermodynamics, Electricity & Magnetism, Optics (both Theoretical & Experimental courses), Theoretical Mechanics, Field Theory, Quantum Physics, Quantum Field Theory, Statistical physics, Soft Matter Physics, Physical kinetics.
- Computer Science, Computational Mathematics, Machine Learning.
- General and Bioorganic Chemistry, Cell biology, Genetic engineering, Super-resolution microscopy.

CGPA: 8.8/10.0

#### ADDITIONAL COURSES:

- Genetic Engineering & Bioinformatics by *Bioinformatics Institute*
- Neural networks and computer vision by *Samsung Research Russia*

## EXPERIENCE

### LABORATORY OF NANOBIO TECHNOLOGIES | TRAINEE

St. Petersburg Academic University, Sep 2017 – May 2018

- **Scientific practice:** Investigation of the Protein Stability. The project consisted of an experiment on protein fluorescence spectroscopy followed by computational modeling and stability prediction.
- **Supervisor:** I. Eliseev, PhD

### LABORATORY FOR STRUCTURAL ANALYSIS AND ENGINEERING OF MEMBRANE SYSTEMS | TRAINEE

Moscow Institute of Physics and Technology, Oct 2020 – Jan 2022

- **Scientific practice:** Computational investigation of the fluorescent LOV domain followed by genetic engineering.
- **Supervisor:** Dr. Ivan Gushchin, PhD

### PHYSTECH.CENTER IOS DEVELOPER, PYTHON DEVELOPER, PRODUCT MANAGER

Moscow, Apr 2021 – now

- Developer of MIPT university [iOS application](#). The application includes following functionality: schedule, news, chat-bot, navigator, payment services.
- Head of Android App Development. Engaged in the preparation of technical tasks, prioritization, management.
- Python developer of various automatic scrapping scripts and telegram-bots.

## SOLO PROJECTS

- **Machine learning:** implementing binary food classifier network in the Android application (2017).
- **Mobile development:** University schedule application on both [Android](#) and [IOS](#) platforms (2018). The project was funded by the [MIPT Endowment fund](#).

## QUALIFICATIONS & SKILLS

- **IOS Development:** Swift, SwiftUI, UIKit
- **Android Development:** Kotlin, Java
- **Python:** PyTorch, PyTorch-Lightning, NumPy, Scipy, Pandas, Matplotlib, Selenium, Django, Telegram
- **Others:**  $\text{\LaTeX}$ , MS Office, C++, Wolfram Mathematica