# Kirill Ryzhikov

 $+7.925.021.91.50 \mid \underline{\text{kirizhikqwer@yandex.ru}} \mid \underline{\text{https://www.linkedin.com/in/kirill-ryzhikov/}} \mid \underline{\text{github.com/KirillR911}} \mid \underline{\text{wkirizhik}} \mid \underline{\text{https://www.linkedin.com/in/kirill-ryzhikov/}} \mid \underline{\text{github.com/KirillR911}} \mid \underline{\text{kirizhikquer@yandex.ru}} \mid \underline{\text{https://www.linkedin.com/in/kirill-ryzhikov/}} \mid \underline{\text{github.com/KirillR911}} \mid \underline{\text{github.com/K$ 

#### EDUCATION

#### Moscow State University

Moscow, Russia

Bachelor of Computational Mathematics and Cybernetics

Aug. 2019 - July 2023

#### EXPERIENCE

#### Research and Development

March 2021 - Present

Tinkoff, Department of Experimental Products, AI Technology Center

Moscow. RU

- Developing virtual assistant visualization techniques
- Research 3D model and photo-realistic vizualization approaches

#### Machine Learning Research Junior

March 2020 - March 2021

Fintech Lab at MIPT associated with Tinkoff

Moscow, RU

- Developed the end-2-end system for talking heads generation from speech and photo
- Developed the telegram bot for testing TalkingHeads generation system
- Created pipeline for parsing youtube to create Russian Audio-Visual speech dataset

## Machine Learning / Deep Learning mentor

Dec 2020 - Present

Tinkoff. Generation

Moscow, RU

- Reading lectures at Deep Learning course
- Created seminar notebooks for Machine Learning/Deep Learning courses
- Held ML/DL online seminars

#### **Publications**

#### 63 All Russian science conference at MIPT

Moscow, RU, 2020

Building facial expressions of a talking person from an audio recording of his speech Diploma for best presentation in AI section

- Created architecture for facial key points sequence generation from speech
- Researched application of Harmonic Convolutions in Speech Embedding task
- Researched application of AutoVC like architectures for speech splitting

Habr Moscow, RU, 2020

Developing a visual assistant

Link

 $\bullet$  Created demo of end2end system for voice assistant visualization

#### PROJECTS

#### PaletteAPI | Python, FastAPI, OpenCV | GitHub

Dec 2020 - Present

- Developed API for major colours palette extraction from image
- Implemented image quantization algorithms for real-time inference

#### **POArt** | Python, OpenCV, Numpy | GitHub

Dec 2020 – Present

• Developed python app to apply Artistic effect to portrait image by mixing some famous piece-of-art and original image according to facial landmarks.

#### HACKATHONES

#### CROC-It-solution school | Android, Java, Firebase |

2018

• 1-st place at social apps sections

# Sber.Hack | Andriod, Java, Python, Numpy|

2018

• 2-nd place overall with project for detecting epilepsy attack Epi.Detect

## Acadoton | Andriod, Java, Python, Numpy, OpenCV, Arduino |

2018

• 4-nd place overall with project of smart lock for easy flat sharing or rent

#### Hack.Moscow | Andriod, Java, Python, Numpy|

2018

• 2nd place in Healthcare track with Stroke.Detect app for strokes detection

# TECHNICAL SKILLS

Languages: Python, C/C++

**DBMS**: MongoDB

Frameworks: PyTorch, Tensorflow, FastAPI, Flask, Telebot

Developer Tools: Git, Docker, Google Cloud Platform, VS Code, Visual Studio, PyCharm, IntelliJ, Vim, bash

Libraries: pandas, NumPy, Matplotlib, Pytorch-Lightning