# Georgii A. Kurshakov

# Robotics Engineer

### Education

2022—... **Ph.D.**, *University of Genoa*, Genoa, *GPA*.

Computer Science & System Engineering: Industrial PhD (with Gter s.r.l.)

2020–2022 **M.Sc.Eng.**, University of Genoa & Keio University, Genoa & Yokohama, GPA: 100/100.

JEMARO Double Degree Master's Program in Advanced Robotics

2016–2020 **B.Sc.Eng., Hons.**, *St. Petersburg Polytechnic University*, St. Petersburg, *GPA:* 4.97/5.0.

Mechatronics and Robotics – Autonomous Robots

#### **Projects**

2023 **REMOT**, with Gter s.r.l., financed by EUSPA.

Development of a wearable device based on geospatial and inertial navigation platforms, for high-precision tracking of the human body movement kinematics.

2022 **Dexterous tendon-driven robotic hand**, *Master's thesis*.

Comprehensive design of a robotic hand with tendon driven fingers, including mechanical design, circuitry, control algorithms and software.

2021 Remote physiotherapy smartphone application, Course project.

Design of a system for doing physiotherapy remotely with the doctor's feedback. Includes a smartphone app, hardware, and a business model. Leader of the project team.

2020 Surround view system for a mobile robot, Bachelor's thesis.

Development of a mobile robot computer vision system with automatic camera calibration and image stitching (C++, OpenCV).

#### Work

2023 **Teaching Assistant**, *University of Genoa*.

Exercises and exams: Robot Dynamics & Control.

2016-2022 **Tutor**, *Self-employed*.

High school tutor in Mathematics and Physics, university tutor in Theoretical Mechanics, Theory of Mechanisms & Machines.

2019-2020 Robotics Engineering Intern, Russian State Scientific Center for Robotics and

Technical Cybernetics.

Research support: Design of mathematical models as a part of team working on a rescue mobile robot for extreme environment.

2019-2021 **Translator/Interpreter**, Marine Propulsion Systems, Ltd.

Written and oral English-Russian translation of technical documentation and negotiations in a company dealing with diesel ship engines.

# Professional Skills

Engineering Mechanical, Electronics, Control Systems

Software Solidworks, Creo, Altium Designer, Simulink

Programming C/C++, Matlab, Python, ROS, OpenCV, Git

#### Personal Skills

- Quick Learner.
- Leadership and responsibility.
- Able to handle multiple situations at the same time.
- Good at explaining and presenting.
- Easily adaptable.
- Talent for languages.

# Languages

English **Proficient** IELTS 8.0

Russian Native

Italian Upper Intermediate Conversationally fluent

Japanese Intermediate

# Research & Development Interests

- Robotics - Automation

- Mechanical Design - Nonlinear Control

- Topology Optimization - Control Systems

#### Reference

Name Dr. Fulvio Mastrogiovanni

Designation Associate Professor

Vice Rector for the International Affairs

Organisation University of Genoa

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