

Mr. Maksim Trifonov, PhD

Day of birth 13th May 1990
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Work experience

11/2021 – present (full time)  Berlin, Germany

Researcher (PostDoc) / Systems Engineer

Department of Design and Operation of Maritime Systems, Research group Underwater technology, Technical University Berlin

Development of a simulation framework in Matlab&Simulink to validate an AUV concept; modeling and simulation of mechatronic systems: GNC, fuel cell, propulsion and other systems; system analysis and optimization of autonomous maritime systems; research project [MUM](#) (Large Modifiable Underwater Mother Ship).

01/2020 – 10/2021 (part-time)  Brunswick, Germany

Freelance Researcher

Efficiency analysis of a hybrid power system combining solar and wind power with battery storage using Monte Carlo simulation; statistical analysis of key indicators of the power system taking into account the spatio-temporal correlation of wind speed.

10/2018 – 12/2019 (part-time)  Moscow, Russia

Lecturer / Research Engineer

Institute of System Analysis and Control, Moscow Aviation Institute (National Research University)

General support of lectures and supervisor of tutorials Systems analysis and Stochastic dynamics; flight control system design and analysis of its fault-tolerance capabilities.

10/2017 – 09/2018 (full time)  Darmstadt, Germany

Visiting Researcher

Institute of Flight Systems and Automatic Control, Technical University Darmstadt

Concept development of the optimal landing control of a hybrid autonomous UAV; analysis of the fault-tolerance capabilities of a flight control system based on robust methods; research project [ACoRUs](#) (Active Fault-Tolerant Control for Redundant UAV's).

09/2016 – 08/2017 (part-time)  Moscow, Russia

Engineer Guidance, Navigation and Control

Guidance, navigation and control department, Roscosmos

Development of modified flight control algorithms based on LQ trajectory-tracking approach; statistical analysis of disturbed motion; modeling and simulation in Matlab&Simulink.

08/2014 – 08/2016 (full time)  Moscow, Russia

Data Engineer

Department of data processing and scripting, GfK-Rus


Programming of data structures; data post-processing and data analysis in SPSS Statistics; SQL queries for data extraction; technical support of projects.

Education

02/2022 – 03/2023  Berlin, Germany

Berlin Higher Education Teaching Certificate

The Berlin Center for Higher Education (BZHL)

09/2020 – 11/2022  Brunswick, Germany

German course

B2 and C1 levels, Volkshochschule Brunswick GmbH

09/2015 – 03/2020  Moscow, Russia

Doctor of Philosophy

in Systems analysis and Control, Moscow Aviation Institute (National Research University)

09/2008 – 01/2014  Moscow, Russia

Master of Science with honors

in Flight dynamics and Control, Moscow Aviation Institute (National Research University)

Skills & Competences

MS Office
Matlab&Simulink
Delphi, Visual Basic
Fortran, LabVIEW
C, Python



Achievements & Certificates

2018 Best oral presentation „ICMCE‘2018“, Amsterdam

2017 DAAD award, fellowship at TU Darmstadt

2014 MSc degree with honors

2013 State scholarship for excellent academic performance

Languages

German C1
English B2
Russian C2



Hobbies & Interests

Hiking, bike, football, building drones.

Autonomous systems, AI, renewable energy sources, multibody systems.

Others

Driving license, category B



Place, date

Signature