# Michail Papadakis

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#### **EDUCATION**

#### 09/2018 - 07/2024 National Technical University of Athens (NTUA), Athens, Greece

- Integrated Master's in Mechanical Engineering (5-year degree; 300 ECTS)
  - o Grade: 8.89/10 "Very Good" (top 10% of my class)
  - Thesis: "Modelling and in-flight torso attitude stabilization of a jumping quadruped" (Grade 10/10)
    - Supervisors: Prof. Kostas Alexis, Prof. Ioannis Poulakakis

09/2012 - 06/2018 Saint Joseph High School, Athens, Greece (Grade: 20/20 "Distinction")

## PROFESSIONAL EXPERIENCE

#### 04/2024 - 07/2024 Visiting Undergraduate Researcher, Autonomous Robots Lab (ARL), Trondheim, Norway

- Erasmus+ exchange student in the Norwegian University of Science and Technology (NTNU)
- Conducted the experimental part of my Diploma Thesis

#### 09/2022 - 08/2023 Undergraduate Researcher, Control Systems Lab - NTUA, Greece

- Developed a simulation and control framework for a prototype robotic leg using C++, ROS and Gazebo
- Verified the framework using comparisons with MATLAB Simscape models and analytical calculations

## 07/2022 - 09/2022 Internship, Foundation for Research and Technology - Hellas (FORTH), Greece

- Research Intern in the Computer Vision and Robotics Laboratory (CVRL)
- Designed a modular underwater robotic worm using Solidworks and manufactured a 3D printed prototype
- Programmed microcontrollers (Arduino, Raspberry Pi) for motion control and sensor data collection

## **PUBLICATIONS**

• M. Papadakis, J. A. Olsen, I. Poulakakis, and K. Alexis, "Modeling and In-flight Torso Attitude Stabilization of a Jumping Quadruped", International Symposium of Robotics Research, California, USA, 8-12 December 2024 [PDF][Site][Video]

## **HONORS & AWARDS**

- Full-Tuition High School Scholarship, 2012-2018
- Scholarship, National Scholarships Foundation, for diligent students from vulnerable social groups, 2023

#### **SKILLS**

•	Robotics Software	Matlab, Simulink, ROS, Gazebo, Drake, MoveIt, Acados
•	Programming	C/C++, Python, Ubuntu, Github, CMake
•	Mechanical Engineering Tools	Solidworks, Ansys Mechanical & Fluent
•	Miscellaneous	3D printing Soldering

#### **PARTICIPATIONS**

01/2024 - 09/2024 **Robotics Engineer,** Beyond Robotics – Student Team, Greece

- Developed and implemented software for motion control of a 6-DOF robotic arm in ROS using MoveIt
- Participated in the European Rover Challenge 2024 (ERC 2024), placing 9th out of 27 teams

## LANGUAGES & TEST SCORES

- English (fluent), French (basic), Greek (native)
- GRE: 170/170 Quantitative Reasoning, 158/170 Verbal Reasoning, 4/6 Analytical Writing