Michail Papadakis

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EDUCATION

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

- Integrated Master in Mechanical Engineering (5-year degree; 300 ECTS)
  - Grade: 8.89/10 "Very Good" (top 5%)
  - 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

03/2022 - 12/2024 **Junior Robotics Engineer**, iKnowHow.S.A., Greece

- Developed software for a robotic welding platform utilizing ROS2 and MoveIt2 and conducted welding tests
- Integrated sensors (3D scanner, seam tracker) and an AR interface, and deployed ML models using REST API

03/2022 - 12/2024 **Private Tutor**, High school mathematics and physics, Greece

04/2024 - 07/2024 **Undergraduate Researcher**, Norwegian University of Science and Technology (NTNU), Trondheim, Norway

- Conducted the experimental part of my thesis at the Autonomous Robots Lab (ARL)

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,** Saint Joseph School 2012-2018
- **Scholarship,** National Scholarships Foundation, for diligent students from vulnerable social groups, 2021

SKILLS

• Robotics Software	Matlab, Simulink, ROS, ROS2, Gazebo, Drake, MoveIt, Acados
• Programming	C/C++, Python, Ubuntu, Github, CMake, FastAPI
• Mechanical Engineering Tools	Solidworks, Ansys Mechanical & Fluent, 3D printing

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