

Dr. Alberto Dallolio

Curriculum Vitae

Personal Data

PLACE AND DATE OF BIRTH:	Mirandola (Modena, Italy) 9 February 1993
ADDRESS:	Mellomveien 12B, 7067, Trondheim, Norway
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Professional Experience

FROM MARCH 2022	Research Fellow in MARINE ROBOTICS at Norwegian University of Science and Technology (NTNU) , Department of Engineering Cybernetics, Trondheim, Norway
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Education

JUNE 2018 - FEBRUARY 2022	PhD in MARINE ROBOTICS at Norwegian University of Science and Technology (NTNU) , Department of Engineering Cybernetics, Trondheim, Norway Thesis: <i>Design and experimental validation of a control architecture for a wave-propelled USV: From system design to ocean studies.</i> Supervisor: Prof. Tor Arne Johansen Co-supervisor: Prof. Jo Arve Alfredsen
SEPTEMBER 2015 - JANUARY 2018	Master Degree in ARTIFICIAL INTELLIGENCE & ROBOTICS La Sapienza University of Rome , Rome, Italy Grade: 108/110 Curriculum: Artificial Intelligence & Robotics Thesis: <i>“Improved vertical tracking control for aerial systems based on electro-aerodynamical modeling and identification”</i> at LAAS-CNRS (Toulouse, France) Supervisor: Prof. Giuseppe Oriolo Co-supervisors: Dr. Antonio Franchi & Dr. Michele Furci
SEPTEMBER 2012 - JULY 2015	Bachelor Degree in AUTOMATION ENGINEERING Alma Mater Studiorum - University of Bologna , Bologna, Italy Grade: 101/110 Curriculum: Automation Engineering Thesis: <i>“Experimental evaluation of a parameter identification procedure for an anthropomorphic industrial manipulator”</i> at Arca Tecnologie Srl Supervisor: Prof. Carlo Rossi
SEPTEMBER 2013 - JULY 2014	Studying at Tongji University , Shanghai, China AlmaTong Double-Degree Exchange Project
JUNE 2012	Graduation in SCIENTIFIC DISCIPLINES Liceo Scientifico Alessandro Tassoni , Modena, Italy Grade: 90/100

Computer Skills

OPERATING SYSTEMS:	GNU/LINUX - UBUNTU, MACOS, MICROSOFT WINDOWS
SOFTWARES & TOOLS:	MATLAB/SIMULINK, SOLIDEDGE, FME, QGIS, MATHEMATICA
PROGRAMMING LANGUAGES:	MATLAB, PYTHON, C/C++, BASH SCRIPTING, BASIC JAVA/JAVASCRIPT
DOCUMENT EDITING:	L ^A T _E X, MICROSOFT OFFICE

Languages

ITALIAN: Mother tongue	NORWEGIAN: Intermediate Knowledge
ENGLISH: Excellent, spoken and written	SPANISH: Basic Knowledge
FRENCH: Excellent, spoken and written	

Publications

- JUNE 2019 “*Long-duration Autonomy for Open Ocean Exploration: Preliminary Results & Challenges*”, Alberto Dallolio et al. RSS 2019 Workshop on Robots in the Wild: Challenges in Deploying Robust Autonomy for Robotic Exploration.
- OCTOBER 2019 “*Long-Endurance Green Energy Autonomous Surface Vehicle Control Architecture*”, Alberto Dallolio, Bendik Agdal, Artur Zolich, Jo A. Alfredsen, Tor A. Johansen. OCEANS 2019, Seattle, Washington, 2019.
- MARCH 2021 “*MBSE modeling of a satellite-ASV system for persistent ocean observation*”, Evelyn Honore-Livermore, Alberto Dallolio, Roger Birkeland, Dennis D. Langer, Cecilia Haskins, Tor A. Johansen. 16th Annual Conference on System of Systems Engineering, Virtual, 2021.
- MAY 2021 “*Experimental Validation of a Nonlinear Wave Encounter Frequency Estimator Onboard a Wave-Propelled USV*”, Alberto Dallolio, Jo A. Alfredsen, Thor I. Fossen, Tor A. Johansen. *IFAC-PapersOnLine* 54, 188–194.
URL: <https://www.sciencedirect.com/science/article/pii/S2405896321014944>,
doi:<https://doi.org/10.1016/j.ifacol.2021.10.092>. 13th IFAC Conference on Control Applications in Marine Systems, Robotics, and Vehicles CAMS 2021.
- JULY 2021 “*A Satellite-USV System for Persistent Observation of Mesoscale Oceanographic Phenomena*”, Alberto Dallolio, Gara Quintana-Diaz, Evelyn Honoré-Livermore, Joseph Garrett, Roger Birkeland, Tor A. Johansen. *Remote Sensing*, Volume 13, no. 16: 3229. <https://doi.org/10.3390/rs13163229>
- AUGUST 2021 “*Design and Validation of a Course Control System for a Wave-Propelled Unmanned Surface Vehicle*”, Alberto Dallolio, Henning Øveraas, Jo A. Alfredsen, Thor I. Fossen, Tor A. Johansen. *Field Robotics*, Volume 2, 748–773.
doi:<https://doi.org/10.55417/fr.2022025>.
- NOVEMBER 2021 “*ENC-based Anti-Grounding and Anti-Collision System for a Wave-Propelled USV*”, Alberto Dallolio, Thea K. Bergh, Pedro R. De La Torre, Henning Øveraas and Tor A. Johansen. *OCEANS 2022 - Chennai*, 2022, pp. 1-10,
doi: 10.1109/OCEANSCennai45887.2022.9775262.
- “*Predicting the Speed of a Wave-Propelled Autonomous Surface Vehicle Using Metocean Forecasts*”, H. Øveraas, A. Heggernes, A. Dallolio, T. H. Bryne and T. A. Johansen. *OCEANS 2022 - Chennai*, 2022, pp. 1-6,
doi: 10.1109/OCEANSCennai45887.2022.9775485.
- MARCH 2022 “*A persistent sea-going platform for robotic fish telemetry using a wave-propelled USV: technical solution and proof-of-concept*”, Alberto Dallolio, Helge B. Bjerck, Henning A. Urke, Jo A. Alfredsen. *Frontiers in Marine Science*.
- MAY 2022 “*Gain-Scheduled Steering Control for a Wave-Propelled Unmanned Surface Vehicle*”, Alberto Dallolio, Henning Øveraas, Tor A. Johansen. *Ocean Engineering*, Elsevier.
- OCTOBER 2022 “*Assimilation of heterogeneous measurements at different spatial scales in the Arctic ocean and Norwegian sea*”, Daniel Ø. Halvorsen, Alberto Dallolio, Morten O. Alver. *OCEANS 2022 - Hampton Roads*, 2022.