Irvin Aloise
Ph.D. Candidate in Engineering in Computer Science

Mail
ialoise@diag.uniroma1.it

Personal Site
https://istinj.github.io

LinkedIn
https://goo.gl/NQvHbJ

Birthday
May 21, 1991

Education

2017 - Oct 2020 (expected), Sapienza University of Rome
Ph.D. in Engineering in Computer Science
Research Topics: Mobile Robotics, Simultaneous Localization and Mapping, Graph Optimization.
Advisor: *Prof. Dr. Giorgio Grisetti*.

2019 - 2020, Rheinische Friedrich-Wilhelms-Universität of Bonn
Visiting Ph.D. Student
September 2019 - February 2020.
Research Topics: 3D-Lidar SLAM, Sensor Calibration.
Supervisor: *Prof. Dr. Cyrill Stachniss*.

2014 - 2017, Sapienza University of Rome
M.Sc. in Artificial Intelligence and Robotics (in English)
Thesis title: *Extended Measurements in Pose-Graph Optimization*.
Supervisor: *Prof. Dr. Giorgio Grisetti* and *Dominik Schlegel*.
Final grade: First Class with Honors ($^{110}/_{110}$ cum laude).

2010 - 2014, Sapienza University of Rome
B.Sc. in Electronic Engineering (in Italian)
Supervisor: *Prof. Giuseppe Oriolo*

Publications

Chordal Based Error Function for 3D Pose-Graph Optimization
IEEE Robotics and Automation Letters (RA-L), 2019
I. Aloise and G. Grisetti
DOI: 10.1109/LRA.2019.2956456

Systematic Handling of Heterogeneous Geometric Primitives in Graph-SLAM Optimization
IEEE Robotics and Automation Letters (RA-L), 2019
I. Aloise, B. Della Corte, F. Nardi and G. Grisetti
DOI: 10.1109/LRA.2019.2918054

Matrix Difference in Pose-Graph Optimization
ArXiv, 2018
I. Aloise and G. Grisetti
arXiv:1809.00952 [cs.RO]

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Teaching Activities

September 2018 - June 2019, Sapienza University of Rome
Teaching Assistant of Operating Systems - *Sistemi Operativi*
Course held by Prof. G. Grisetti, B.Sc. in Engineering in Computer Science, 6 ECTS credits.

November 2017 - June 2018, Sapienza University of Rome
Teaching Assistant of Operating Systems - *Sistemi Operativi*
Course held by Prof. G. Grisetti, B.Sc. in Engineering in Computer Science, 6 ECTS credits.

Languages

Italian
Mother-tongue

English
Advanced

Skills

Programming
C++, C, Octave, Matlab, Python, OpenGL and ImGui.

Operating Systems
Ubuntu, Windows, MacOS

Interests

Professional
Mobile Robotics, SLAM, Sensor Calibration, Computer Vision, Autonomous Robotics, Machine Learning

Personal
Music, Cinema, Video-games, Technology, Photography, Motor Sports

Personal Projects

2019, Rheinische Friedrich-Wilhelms-Universität of Bonn
Extrinsic Calibration between 3D-Lidar and Monocular Camera

2016, Sapienza Univesity of Rome, Exam project
Development of a Simulation Environment for Teleoperated Surgical Tasks

2016, Sapienza University of Rome, Exam project
Analyzing Visualization Techniques for Convolutional Neural Neworks

2015, Sapienza University of Rome, Exam project
A Third-Person Game Based on the `Three.js` **Library**

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