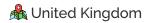
Alberto Soragna







ABOUT ME

I am a Software Engineer with com-

prehensive hands-on experience in au-

tonomous mobile robotics, proven in

developing software architecture, be-

haviors, and estimation algorithms. As

a ROS 2 expert, I am a member of its

Technical Steering Committee and one

of the maintainers of its core libraries.

I am a Technical Lead and a skilled con-

tributor, and I excel at organizing and executing complex projects for small

development teams, adhering to Agile

methodologies, with a focus on writ-

ing clean, well-documented, and thor-

oughly tested code. I expertly track

team progress and communicate effec-

tively with management and stakehold-

ers through concise and informative re-

ports. I remain aligned with business

priorities and can move with urgency to

In my free time, I enjoy a balance of outdoor and indoor hobbies such as hiking,

playing board games, reading books,

It is my go-to language. I have an in-

depth understanding of its features and

design choices. I contributed to define

coding guidelines for my company and

I often use it for prototypes and nonperformance-critical applications.

Worked on projects using Bash, C, Java,

deliver successful solutions.

and studying personal finance

TECH SKILLS

8+ years experience with C++

mentored junior developers.

Proficient with Python

JavaScript, Matlab.



EXPERIENCE



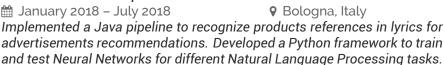
Principal Robotics Engineer

iRobot

August 2018 - Present Pasadena, CA, USA

- Promoted from Robotics Engineer to Senior Robotics Engineer to Principal Robotics Engineer, consistently exceeding expectations.
- Technical Lead of 5 people team that improved ROS 2 performance, reducing CPU usage by over 70%, and deployed it on Roomba™ robots.
- Software Architect for floorcare robots and the Create™3 application.
- Improved accuracy of dead-reckoning through data synchronization.
- · Developed libraries for writing strategies using behavior trees.

Data Scientist MusixMatch





Robot

♀ Augsburg, Germany Designed and implemented C++ algorithms for the efficient autonomous exploration of environments using potentially imprecise prior information. Published multiple patents and a paper based on this project.

I KUKA Robotics



FDUCATION

Graduate Internship



M.S. Artificial Intelligence and Robotics La Sapienza September 2015 - January 2018 Rome, Italy Final Grade: 110/110 With Honors | Thesis: "Active SLAM using Connectivity Graphs as Prior" Advisor: Prof. Giorgio Grisetti



B.S. Automation Engineering University of Bologna

September 2012 - June 2015 Bologna, Italy Final Grade: 109/110 | Thesis: "Design and Implementation of the Guid-



AWARDS AND CERTIFICATES

AlmaTong Double-Degree Scholarship

Sapienza University Excellence Path

ance Law for a Quadrotor Aerial Vehicle" Advisor: Prof. Lorenzo Marconi

ANGUAGES

Daily user of Docker, Git, LaTeX.



2017

2013

ltalian: Mothertongue

= English: Fluent 🚱 Chinese: Basic spoken

PUBLICATIONS



- 2019 Active SLAM using Connectivity Graphs as Priors. Soragna A., Baldini M., Joho D., Kuemmerle R., and Grisetti G. IROS.
- ROS 2 for Consumer Robotics. Soragna A., Oxoby J., and Goel D. 2019 ROSCon.
- 2018 Optimal graph exploration with active loop closure. Soragna A., Baldini M., and Kuemmerle R. European patent.
- 2018 Online adaptation of a prior topology graph to the observed environment during autonomous exploration. Soragna A., Baldini M., and Joho D. European patent.