

MATHIAS FASSINI MANTELLI

PERSONAL INFORMATION

Born in Brazil, 20 October 1993
email mfmantelli@inf.ufrgs.com
phone +47 405 82 349

PROFESSIONAL EXPERIENCE

International event Nov 2015–May 2017 Organization Team Member, HRATC
3rd and 4th Robotics and Automation Technology Challenge
Extended an existing robot simulator by an additional environment
Supported international teams and assessed their performance

EDUCATION

Doctorate Mar 2017–present Federal University of Rio Grande do Sul and University of Oslo
Advised by Mariana Luderitz Kolberg
Computer Science · *Specialization in Mobile Robotics*
Tutor for algorithm theory during 3rd semester
Research subject: *Long-term semantic simultaneous localization and mapping*
Lecturer of the course *Advanced Topics in Artificial Intelligence for Intelligent Systems* from University of Oslo

Master of Science Mar 2015–Feb 2017 Federal University of Rio Grande do Sul
Advised by Mariana Luderitz Kolberg
Computer Science · *Specialization in Mobile Robotics*
Tutor for Algorithm Theory during 2nd semester
Thesis: *A Novel Measurement Model for the Monte Carlo Algorithm Applied to the UAV Localization Problem Using Satellite Images*

Bachelor of Science Mar 2011–Feb 2015 Federal University of Mato Grosso
Advised by Rafael Teixeira
Tutor for C programming during 7th semester.
Developed an autonomous car using Lego Mindstorms
Thesis: *Evaluation of Combined Classifiers Applied to the Diagnosis of Childhood Pneumonia*

EXTRA-CURRICULAR ACTIVITIES

Volunteering Mar 2010–present Order of DeMolay
Held different positions such as President of the State of Mato Grosso and Treasurer and managed public affairs
Received individual and group awards for outstanding leadership skills and funds raised

PUBLICATIONS

- [1] Leonardo Perdomo, Diego Pittol, Mathias Mantelli, Renan Maffei, Mariana Kolberg, and Edson Prestes. “c-M2DP: A Fast Point Cloud Descriptor with Color Information to Perform Loop Closure Detection”. In: *2019 IEEE 15th International Conference on Automation Science and Engineering - CASE*.
- [2] Mathias Mantelli, Diego Pittol, Renata Neuland, Arthur Ribacki, Renan Maffei, Vitor Jorge, Edson Prestes, and Mariana Kolberg. “A novel measurement model based on abBRIEF for global localization of a UAV over satellite images”. In: *Robotics and Autonomous Systems* 112 (2019), pp. 304–319. ISSN: 0921-8890. DOI: <https://doi.org/10.1016/j.robot.2018.12.006>.
- [3] Arthur Ribacki, Vitor A. M. Jorge, Mathias Mantelli, Renan Maffei, and Edson Prestes. “Vision-Based Global Localization Using Ceiling Space Density”. In: *Robotics and Automation, 2018*. 2018, pp. 3502–3507. DOI: 10.1109/ICRA.2018.8460515.
- [4] R. Madhavan, A. Amory, E. Prestes, R. Guedes, A. Bergamin, R. Neuland, M. Mantelli, D. Kindin, and F. Rodrigues. “The 2017 Humanitarian Robotics and Automation Technology Challenge [Humanitarian Technology]”. In: *IEEE Robotics Automation Magazine* 24.4 (2017), pp. 127–129. ISSN: 1070-9932. DOI: 10.1109/MRA.2017.2757722.
- [5] E. Prestes, L. Marques, R. Neuland, M. Mantelli, R. Maffei, S. Dogru, J. Prado, J. Macedo, and R. Madhavan. “The 2016 Humanitarian Robotics and Automation Technology Challenge [Competitions]”. In: *IEEE Robotics Automation Magazine* 23.3 (2016), pp. 23–24. ISSN: 1070-9932. DOI: 10.1109/MRA.2016.2587921.
- [6] L. Lima, D. Londero, M. Mantelli, and L. Azevedo. “RoboCar - Prototype of an Autonomous Car”. In: *V Escola Regional de Informtica* (2014).
- [7] D. Londero, L. Lima, M. Mantelli, and L. Azevedo. “Robocar - A Hibryd Architecture and Lego Mindstorms”. In: *Congresso de Engenharia e Tecnologia* (2014).
- [8] M. Mantelli and R. Sousa. “Evaluation of Combined Classifiers in a Childhood Pneumonia Diagonosis System”. In: *V Escola Regional de Informtica* (2014).

COMPUTER AND LANGUAGE SKILLS

<i>Programming</i>	C, C++, Python, MATLAB, L ^A T _E X
<i>Language</i>	English · TOEFL-ITP B2, Spanish · Proficient
<i>Interests</i>	Teaching · Travelling · DeMolay · Podcasts and books

January 9, 2020