



Curriculum Vitae

Luis Fernando Piardi

Luis Fernando Piardi. Published 1 articles in journals. Has 7 section(s) of books. Works in the area(s) of Engineering and Technology with emphasis on Electrotechnical Engineering, Electronics and Informatics with emphasis on Robotics and Automatic Control. In his curriculum Ciência Vitae the most frequent terms in the context of scientific, technological and artistic-cultural output are: control engineering computing; data visualisation; microcontrollers; mobile robots; path planning; robot dynamics; testing algorithms; simulation environments; simulated robot; processing capabilities; robotics competitions; robot applications; international competition; fastest mobile robot; robot prototyping; hardware-in-the-loop capability; hardware-in-the-loop simulator tool; micromouse competition; 3D visualization; Mobile robots; Robot sensing systems; Collision avoidance; Service robots; Wheels; Micromouse; Simulator; Robotics Competitions; Hardware in the Loop; Mobile robot; Spatial mapping radioactive substances; Path planning; Genetic algorithm; Kalman filter; Ultra-wide band; Domínio/Área Científica::Engenharia e Tecnologia::Outras Engenharias e Tecnologias; .

Identification

Personal identification

Full name

Luis Fernando Piardi

Gender

Male

Birth date

1995/01/12

Citation names

Piardi, Luis

Piardi, L.

Author identifiers

Ciência ID

C51A-82DB-016F

ORCID iD

0000-0003-1627-8210

Email addresses

piardi@ipb.pt (Professional)

Websites

https://www.researchgate.net/profile/Luis_Piardi (Social media)

Knowledge fields

Engineering and Technology - Electrotechnical Engineering, Electronics and Informatics - Robotics and Automatic Control

Languages

Language	Speaking	Reading	Writing	Listening	Peer-review
Portuguese (Mother tongue)					
English	Upper intermediate (B2)	Upper intermediate (B2)	Upper intermediate (B2)	Upper intermediate (B2)	Upper intermediate (B2)

Education

	Degree	Classification
2019/03/05 - 2023/03/05 Ongoing	Engenharia Elétrica E Informática Industrial (Doutoramento)	
	Universidade Tecnológica Federal do Paraná, Brazil	
2019/02/07 Concluded	Engenharia Eletrotécnica e de Computadores (Licenciatura)	
	Instituto Politécnico de Bragança, Portugal	
2013/03/12 - 2018/05/13 Concluded	Engenharia Eletrônica (Graduado)	
	Universidade Tecnológica Federal do Paraná - Câmpus Toledo, Brazil	
2017/02/02 - 2018/04/08 Concluded	Engenharia Industrial (Mestrado)	
	Instituto Politécnico de Bragança, Portugal	

Affiliation

Science

2018/07/09 - Current	Researcher (Research) Instituto Politécnico de Bragança, Portugal
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Teaching in Higher Education

2019/09/16 - Current	Invited Assistant Teacher (Polytechnic Teacher) Instituto Politécnico de Bragança, Portugal
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Others

2017/03/04 -
2018/03/12 Fellowships
Fundação Parque Tecnológico Itaipu, Brazil

2016/07/11 - 2017/02/10 Stagiaire
Fundação Parque Tecnológico Itaipu, Brazil

Outputs

Publications

- | | | |
|------------------|---|--|
| Book chapter | 1 | Piardi, Luis. 2019. "Augmented Reality System for Multi-robot Experimentation in Warehouse Logistics". http://dx.doi.org/10.1007/978-3-030-35990-4_26 .
10.1007/978-3-030-35990-4_26 |
| | 2 | Piardi, Luis. 2019. "A Bio-Inspired Approach for Robot Swarm in Smart Factories". http://dx.doi.org/10.1007/978-3-030-36150-1_25 .
10.1007/978-3-030-36150-1_25 |
| | 3 | Piardi, Luis. 2019. "Indoor Environment Monitoring in Search of Gas Leakage by Mobile Robot". http://dx.doi.org/10.1007/978-3-030-36150-1_28 .
10.1007/978-3-030-36150-1_28 |
| | 4 | Piardi, Luis. 2019. "3D Simulator Based on SimTwo to Evaluate Algorithms in Micromouse Competition". http://dx.doi.org/10.1007/978-3-030-16181-1_84 .
10.1007/978-3-030-16181-1_84 |
| | 5 | Piardi, Luis. 2018. "Development of a Dynamic Path for a Toxic Substances Mapping Mobile Robot in Industry Environment". http://dx.doi.org/10.1007/978-3-319-70836-2_54 .
10.1007/978-3-319-70836-2_54 |
| | 6 | Piardi, Luis. 2018. "Dynamic Collision Avoidance System for a Manipulator Based on RGB-D Data". http://dx.doi.org/10.1007/978-3-319-70836-2_53 .
10.1007/978-3-319-70836-2_53 |
| | 7 | Piardi, Luis. 2018. "Path Planning Optimization Method Based on Genetic Algorithm for Mapping Toxic Environment". http://dx.doi.org/10.1007/978-3-319-91641-5_19 .
10.1007/978-3-319-91641-5_19 |
| <hr/> | | |
| Conference paper | 1 | Piardi, Luis. 2019. "WsBot: A Tiny, Low-Cost Swarm Robot for Experimentation on Industry 4.0".
10.1109/lars-sbr-wre48964.2019.00058 |
| | 2 | Piardi, Luis. 2019. "Machine Learning Applied to an Intelligent and Adaptive Robotic Inspection Station".
10.1109/indin41052.2019.8972298 |
| | 3 | Piardi, Luis. 2019. "Hardware-in-the-loop simulation approach for the Robot at Factory Lite competition proposal".
10.1109/icarsc.2019.8733649 |

- 4 Piardi, Luis. 2019. "A* search algorithm optimization path planning in mobile robots scenarios".
10.1063/1.5114223
- 5 Piardi, Luis. 2019. "3D Simulator with Hardware-in-the-Loop capability for the Micromouse Competition". 1-6.
10.1109/ICARSC.2019.8733640
- 6 Piardi, Luis. 2019. "Coverage path planning optimization based on Q-learning algorithm".
10.1063/1.5114220
- 7 Piardi, Luis. 2018. "Development of a Ground Truth Localization System for Wheeled Mobile Robots in Indoor Environments based on Laser Range-finder for Low-cost Systems".
10.5220/0006862203510358

Journal article	1	Luis Piardi; Vivian Cremer Kalempa; Marcelo Limeira; André Schneider de Oliveira; Paulo Leitão. 2019. "ARENA—Augmented Reality to Enhanced Experimentation in Smart Warehouses". <i>Sensors</i> 19 (19): 4308-4308. https://doi.org/10.3390/s19194308 . 10.3390/s19194308
Thesis / Dissertation	1	Piardi, Luis. 2018. "Application of a mobile robot to spatial mapping of radioactive substances in indoor environment". Master. http://hdl.handle.net/10198/17819 .

Activities

Event organisation

	Event name Type of event (Role)	Institution / Organization
2019/11/21 - 2019/11/21	Organization of the special Sessions: Mobile Robots for Industrial Environments in the Robot in ROBOT'2019: Fourth Iberian Robotics Conference. (2019/12/20 - 2019/12/20) Symposium (Member of the Scientific Committee)	Universidade do Porto Faculdade de Engenharia, Portugal
2019/07/01 - 2019/07/05	5th International Summer School on Industrial Agents (2019/07/01 - 2019/07/05) Meeting (Member of the Organising Committee)	Instituto Politécnico de Bragança Escola Superior de Tecnologia e Gestão, Portugal

Event participation

	Activity description Type of event	Event name Institution / Organization
2019/11/20 - 2019/11/22	Robotics Conference Conference	ROBOT 2019: Fourth Iberian Robotics Conference Universidade do Porto Faculdade de Engenharia, Portugal
2018/05/16 - 2018/05/18	Mathematics and Optimization Conference Conference	BIOMA2018: International Conference on Bioinspired Methods and Their Applications Université de Lille, France
2017/11/22 - 2017/11/24	Robotics Conference Conference	ROBOT'2017 - Third Iberian Robotics Conference

Committee member

	Activity description Role	Institution / Organization
2019/12/20 - 2019/12/20	Workshop on Disruptive Information and Communication Technologies for Innovation and Digital Transformation Member	Instituto Politécnico de Bragança Escola Superior de Tecnologia e Gestão, Portugal

Distinctions

Award

2019	Highly Comemended Paper of ROBOT2019 Conference. Paper Title: Augmented Reality System for Multi-Robot Experimentation in Warehouse Logistics.
2018	Caixa Geral de Depósito Award - Best Graduate Student at the Escola Superior de Tecnologia e Gestão do Instituto Politécnico de Bragança (2017/2018) Instituto Politécnico de Bragança, Portugal
2018	Best student in Master of Industrial Engineering (2017/2018) Instituto Politécnico de Bragança, Portugal