Nuno Ferreira Duarte

Curriculum vitae

Contact Information

Nuno Ferreira Duarte
Lisbon, Portugal

E-mail: nferreiraduarte@isr.tecnico.ulisboa.pt
Website: https://nunoduarte.github.io/

Education

2016– Ph. D. student, Joint Ph. D. Degree in Robotics, Brain and Cognition,
Institute for Systems and Robotics (ISR),
Instituto Superior Técnico, University of Lisbon, Lisbon, Portugal, and
LASA, École polytechnique fédérale de Lausanne (EPFL), Switzerland

2016 M. Sc., Decision, Control & Robotics, Electrical and Computer Engineering,
Instituto Superior Técnico, University of Lisbon, Lisbon, Portugal

2014 B. Sc., Electrical and Computer Engineering, Instituto Superior Técnico,
University of Lisbon, Lisbon, Portugal

Professional Experience

2019-2020	Teaching Assistant in Applied Machine Learning Course at EPFL
2019	Certificate of Proficiency in English (CPE), Cambrigde
2015	Research Intern, Caltech, California
2011	Robotic's National Festival, Instituto Superior Técnico, Lisbon

Publications

2022 If You Are Careful, So Am I! How Robot Communicative Motions Can Influence Human Approach in a Joint Task, *International Conference on Social Robotics*

2022 The role of object physical properties in human handover actions: applications in robotics, *IEEE Transactions on Cognitive and Developmental Systems*

2022 The Gaze Dialogue: Non-verbal communication in Human-Human and Human-Robot Interaction, *IEEE Transactions on Cybernetics*

2022 Robot Learning physical object properties from Human Visual Cues:A novel approach to infer the fullness level in containers, *IEEE International Conference on Robotics and Automation*

2021 Learning Motor Resonance in Human-Human and Human-Robot Interaction with Coupled Dynamical Systems, *IEEE International Conference on Robotics and Automation*

2020 From human action understanding to robot action execution: how the physical properties of handled objects modulate non-verbal cues, *IEEE International Conference on Robot and Human Interactive Communication*

2020 Benchmark for Human-to-Robot Handovers of Unseen Containers with Unknown Filling, *IEEE Robotics and Automation Letters*

2019 Coupling of Arm Movements during Human-Robot Interaction: the handover case, *IEEE International Conference on Robot and Human Interactive Communication*

2019 Biologically Inspired Controller of Human Action Behaviour for aHumanoid Robot in a Dyadic Scenario, *IEEE EUROCON*
2018 Action Alignment from Gaze Cues in Human-Human and Human-Robot Interaction, *European Conference on Computer Vision - ECCV 18 Workshop*
2018 A dataset of head and eye gaze during dyadic interaction task for modeling robot gaze behavior, *International Conference on Electromechanics and Robotics "Zavalishin's Readings"*
2018 Action Anticipation: Reading the Intentions of Humans and Robots, *IEEE Robotics and Automation Letters*
2018 GeeBot: A Robotic Platform for Refugee Integration, *ACM/IEEE International Conference on Human-Robot Interaction*
2018 Experiments with Vizzy as a Coach for Elderly Exercise, *ACM/IEEE International Conference on Human-Robot Interaction*

PRESENTATIONS

Conference talks

2022 "Robot Learning physical object properties from Human Visual Cues:A novel approach to infer the fullness level in containers", IEEE ICRA in Philadelphia. May 23 - 27.
2021 "Learning Motor Resonance in Human-Human and Human-Robot Interaction with Coupled Dynamical Systems", IEEE ICRA in China (Online). May 30 - June 5.
2020 "From human action understanding to robot action execution: how the physical properties of handled objects modulate non-verbal cues", IEEE RO-MAN in Chile (Online). October 26–30.
2019 "Coupling of Arm Movements during Human-Robot Interaction: the handover case", IEEE RO-MAN in New Delhi, India. October 14–18.
2019 "Biologically Inspired Controller of Human Action Behaviour for aHumanoid Robot in a Dyadic Scenario", IEEE EUROCON in Novi Sad, Serbia. July 1–4.
2018 "Studying the human behavior in dyadic interactions and applications to human-robot interactions", Mind Brain College in Lisbon, Portugal. November 14–15.
2018 "Action Alignment from Gaze Cues in Human-Human and Human-Robot Interaction", The Conference in Munique, Germany. September 8–14.
2018 "Studying the human behavior in dyadic interactions and applications to human-robot interactions", LARSys Meeting in Lisbon, Portugal. June 14–15.
2018 "A dataset of head and eye gaze during dyadic interaction task for modeling robot gaze behavior", The Conference in Saint Petersburg, Russia. April 18–21.
2018 "GeeBot: A Robotic Platform for Refugee Integration", The Conference in Chicago, USA. March 5–8.
2018 "Experiments with Vizzy as a Coach for Elderly Exercise", The Conference in Chicago, USA. March 5–8.

Departmental talks

2020 Vislab, Institute Systems and Robotics (ISR), University of Lisbon. April 14. "From human action understanding to robot action execution: how the physical proper-ties of handled objects modulate non-verbal cue"
2019 Vislab, Institute Systems and Robotics (ISR), University of Lisbon. March 12. "A Dataset Design for Human-Human and Human-Robot Collaboration"
2019 Vislab, Institute Systems and Robotics (ISR), University of Lisbon. January 29. "On going work of my Ph.D."
2018 LASA, EPFL, Lausanne, Switzerland. September 21. "Studying the human non-verbal communication behavior in dyadic interactions and applications to human-robot interactions"
2018 Vislab, Institute Systems and Robotics (ISR), University of Lisbon. September 4. "Action Alignment from Gaze Cues in Human-Human and Human-Robot Interaction"

2018 Vislab, Institute Systems and Robotics (ISR), University of Lisbon. May 8. "A Dataset of Head and Eye Gaze during Dyadic Interaction Task For Modeling Robot Gaze Behavior"
2018 Vislab, Institute Systems and Robotics (ISR), University of Lisbon. January 16. "GeeBot - A robotic platform for refugee integration"
2017 Vislab, Institute Systems and Robotics (ISR), University of Lisbon. October 17. "Action Anticipation: Reading the Intentions of Humans and Robots"
2017 Vislab, Institute Systems and Robotics (ISR), University of Lisbon. March 28. "Facilitating Intention Prediction for Humans by Optimizing Robot Motions"

PROFESSIONAL SERVICE

2022 Reviewer for International Journal of Social Robotics x6
2022 Reviewer for IEEE International Conference on Robotics and Automation
2022 Reviewer for IEEE International Conference on Human Robot Interaction
2021 Reviewer for IEEE International Conference on Development and Learning
2021 Reviewer for IEEE/RSJ International Conference on Intelligent Robots and Systems x2
2021 Reviewer for International Journal of Social Robotics x2
2020 Reviewer for International Journal of Social Robotics x2
2020 Reviewer for Journal of Interaction Studies
2020 Reviewer for IEEE/RSJ International Conference on Intelligent Robots and Systems
2020 Reviewer for Journal John Benjamins - Interaction Studies
2020 Reviewer for IEEE International Conference on Robotics and Automation
2019 Reviewer for IEEE/RSJ International Conference on Intelligent Robots and Systems
2018 Reviewer for IEEE International Conference on Robotics and Automation
2018 Reviewer for Journal of Frontiers in Robotics and AI
2018 Reviewer for IEEE International Conference on Robotics and Automation
2017 Reviewer for IEEE International Symposium on Intelligent Systems and Informatics
2017 Reviewer for IEEE International Conference on Advanced Intelligent Mechatronics

COMPUTER SKILLS

Programming
Python, Matlab, C++

Software development
Pupil, OptiTrack, YARP, ROS

LANGUAGES

Portuguese (Native)
English (Native) - CPE Cambridge
Spanish (Elementary)

REFERENCES

Nuno Ferreira Duarte
Vislab, Institute Systems and Robotics (ISR), Instituto Superior Técnico (IST)
University of Lisbon
Portugal
nferreiraduarte@isr.tecnico.ulisboa.pt

Nuno Ferreira Duarte
Learning Algorithms and Systems Laboratory (LASA)
Ecole Polytechnique Federale de Lausanne (EPFL)
Lausanne
Switzerland
(+41)216935464
nuno.ferreiraduarte@epfl.ch