Jesús BUJALANCE MARTIN



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29 April 1996

European driving licence B

Spanish

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Languages -

Spanish fluent

French fluent

English C2 113/120 TOEFL IBT (2017)

Mandarin B2 292/300 HSK 3 (2018)

Hobbies

Sports basketball, judo

Music guitar, salsa

Cooking

Android development

PhD candidate - engineering

Experience

2020- PhD: Research Scientist & Teaching Assistant at Mines Paris - PSL

Deep reinforcement learning and learning from demonstrations

Paris

for robot manipulators

Apr-Sep 2019 Intern at ARMINES Center for Robotics

Deep learning for collaborative robotics: few-shot gesture

recognition and continuous motion control

Education

| 2018-2019 | Paris-Saclay University - ENS Cachan - MSc MVA Computer Vision Image processing Deep Learning | Paris |
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| Feb-Jul 2018 | Shanghai Jiao Tong University - Semester Exchange Control theory Mobile Robotics | Shanghai |
| 2016-2019 | IP Paris - Télécom ParisTech - Engineering cycle Signal and Image processing Machine Learning | Paris |
| 2014-2016 | Preparatory classes for engineering schools | Lyon |

Skills

CloudCompare Robotics ROS CoppeliaSim Bullet **OMPL JAX** Deep Learning **PyTorch** Scikit-learn Keras Ray Other tools Git Docker **VirtualBox GCP Redis** Programming **Python** Linux Matlab **Simulink** Java

Publications

- 1. Jesus Bujalance Martin, Fabien Moutarde. **Reward Relabelling for combined Reinforce-ment and Imitation Learning on sparse-reward tasks.** Conference on Autonomous Agents and Multiagent Systems (AAMAS), 2023.
- 2. Dániel Horváth, Jesús Bujalance Martín, Ferenc Gábor Erdős, Zoltán Istenes, Fabien Moutarde. HiER: Highlight Experience Replay and Easy2Hard Curriculum Learning for Boosting Off-Policy Reinforcement Learning Agents.
- 3. Jesus Bujalance Martin, Tao Yu, Fabien Moutarde. **Pre-trained Image Encoder for Data-Efficient Reinforcement Learning and Sim-to-Real transfer on Robotic-Manipulation tasks.** Workshop on Pre-training Robot Learning at Conference on Robot Learning (CoRL), 2022.
- Jesus Bujalance Martin, Raphaël Chekroun, Fabien Moutarde. Learning from demonstrations with SACR2: Soft Actor-Critic with Reward Relabeling. Deep RL Workshop at Conference on Neural Information Processing Systems (NeurIPS), 2021.
- 5. Jesus Bujalance Martin, Fabien Moutarde. **Real-time gestural control of robot manipulator through Deep Learning human-pose inference.** International Conference on Computer Vision Systems (ICVS), 2019.