

## Pedro Vicente



My thesis is about Markerless Visual Servoing in humanoid robots with internal model learning. We aim to improve accuracy of reaching and grasping tasks.

### *Background*

- M.Sc, IST 2014
- B.Sc, IST 2013

### *Nationality:*

Portuguese

### *Date of Birth:*

1989

### *Experience:*

- Part-time research assistant, Vislab, EU project FIRST-MM 2011-2013
- Research assistant, Vislab, EU project Poeticon++ 2013-2015
- PhD student, IST, 2016-

### *Advisors*

- Alexandre Bernardino (IST)
- José Santos-Victor (IST)

### *Recent publications or summary of research topic*

- P. Vicente, L. Jamone, and A. Bernardino, “Towards markerless visual servoing of grasping tasks for humanoid Robots”, in IEEE ICRA, 2017 (accepted for publication)
- P. Vicente, L. Jamone, and A. Bernardino, “Robotic Hand Pose Estimation Based on Stereo Vision and GPU-enabled Internal Graphical Simulation” Journal of Intelligent & Robotic Systems, May 2016
- P. Vicente, L. Jamone, and A. Bernardino, “Online body schema adaptation based on internal mental simulation and multisensory feedback,” Frontiers in Robotics and AI, vol. 3, no. 7, March 2016
- P. Vicente, R. Ferreira, L. Jamone, and A. Bernardino, “GPU-Enabled Particle Based Optimization for Robotic-Hand Pose Estimation and Self-Calibration”, in IEEE ICARSC, 2015, pp. 3–8
- P. Vicente, R. Ferreira, L. Jamone, and A. Bernardino, “Eye-hand online adaptation during reaching tasks in a humanoid robot,” in IEEE ICDL-Epirob, 2014, pp. 175–180