

# Armando Pesenti Gritti

## Curriculum Vitae

### Work Experience

Sep 2015–Present **Research Engineer and System Administrator**, *KTP Associate*, Middlesex University and Caritas Anchor House.

### Education

2011–2014 **Master's degree**, *Politecnico di Milano*, Computer Engineering.  
2009–2011 **Bachelor's degree**, *Politecnico di Milano*, Computer Engineering.  
2000–2005 **Science High School diploma**, *Istituto di Istruzione Superiore D. M. Turollo*.  
online courses **Machine Learning Engineer Nanodegree**, *Udacity*.  
**Machine Learning**, *Stanford University, Coursera*.  
**Learning from Data**, *California Institute of Technology, edX*.  
**Introduction to Artificial Intelligence**, *Udacity*.  
**Artificial Intelligence for Robotics**, *Udacity*.  
**Game Theory**, *Stanford University, Coursera*.

### Master thesis

title *People Detection and Tracking from a Small-footprint Mobile Ground Robot using an RGB-D Sensor*  
supervisor Prof. Vincenzo Caglioti, Politecnico di Milano  
co-supervisor Prof. Alessandro Giusti, IDSIA Dalle Molle Institute for Artificial Intelligence, Lugano  
description Small-footprint mobile ground robots are by necessity equipped with sensors which lie close to the ground. Reliably detecting and tracking people from this unusual viewpoint is a challenging problem, whose solution is a key requirement for many applications involving human-robot interaction. We propose a robust solution for cluttered indoor environments, using an inexpensive RGB-D sensor.

### Publications

title *Kinect-based People Detection and Tracking from Small-Footprint Ground Robots*  
authors A. Pesenti Gritti, O. Tarabini, J. Guzzi, G.A. Di Caro, V. Caglioti, L.M. Gambardella, A. Giusti  
conference International Conference on Intelligent Robots and Systems (IROS) Chicago, 2014  
link <http://ieeexplore.ieee.org/xpl/articleDetails.jsp?arnumber=6943139>

title *Perceiving People from a Low-Lying Viewpoint*  
authors A. Pesenti Gritti, O. Tarabini, A. Giusti, J. Guzzi, G.A. Di Caro, V. Caglioti, L.M. Gambardella  
conference Human Robot Interaction (HRI) Bielefeld, 2014, Video Session  
link <http://dl.acm.org/citation.cfm?id=2559641>

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## Projects

- project Open source implementation of RGBD-based people detection and tracking from small-footprint mobile ground robots  
link <http://bit.ly/perceivingpeople>
- project Drive Time - simple iOS application that displays how the travel time is influenced by traffic conditions  
link <https://itunes.apple.com/us/app/drive-time-smart-travel!/id897607306?mt=8>
- project Hardware and software development of a small autonomous mobile robot, based on Arduino  
link <http://youtu.be/WHwipTO1yeM>
- project MATLAB library implementing Neural Networks exploiting GPU with CUDA  
link <https://github.com/arpesenti/neural-network-cuda>

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## Languages

Italian **Mother tongue**  
English **Level C1**

*2010 - IELTS certificate, 8/9*

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## Computer skills

Operating Systems Mac OSX, Linux, Windows  
Programming Languages Java, Python, C, MATLAB, Objective-C, Swift, Scala, Javascript, PHP  
Frameworks Cocoa Touch (iOS), Java EE, Node.js  
Versioning Tools Git, SVN  
Markup Languages Latex, HTML  
Database Management MySQL  
Systems