Armando Pesenti Gritti

Curriculum Vitae

Work Experience

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

Education

Mar 2016–Present **MSc by Research**, *Middlesex University*, "Machine Learning to Support Social Inclusion".

2011–2014 **MSc**, *Politecnico di Milano*, Computer Engineering.

2009–2011 **BSc**, *Politecnico di Milano*, Computer Engineering.

2000–2005 **Science High School diploma**, *Istituto di Istruzione Superiore D. M. Turoldo*.

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

Languages

Italian **Mother tongue**

English **Level C1** *2010 - IELTS certificate, 8/9*

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 Systems: MySQL

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