Curriculum Vitae dell'ing. Ignazio Infantino

Ricercatore dal 2001 nell'ambito della Robotica Sociale, Sistemi Cognitivi, Visione Artificiale e Interazione Uomo-Robot. Varie esperienze di coordinamento di gruppi di ricerca e laboratori scientifici del Consiglio Nazionale delle Ricerche. Partecipazione e coordinamento di attività di trasferimento tecnologico in ambito di progetti regionali, nazionali ed internazionali su sistemi intelligenti e robotica.

INTERESSI DI RICERCA

Robotics, social robotics, cognitive architecture, artificial vision, human-robot interaction, human-computer interaction, image processing and analysis, 3D object/scene recognition and reconstruction.

Autore di oltre 100 articoli scientifici pubblicati su riviste internazionali e atti di conferenze internazionali, con più di 750 citazioni (da aggiornato al 2019). Membro del PC e chair di varie conferenze internazionali. Menbro dell'editorial board delle seguenti riviste: Paladyn, Journal of Behavioral Robotics; Journal of Artificial Intelligence and Consciousness

H-Index 15 (HI-10:26), sorgente Google Scholar , https://scholar.google.com/citations?user=LwTTH9YAAAAJ&hl=en&oi=ao, Scopus ID: http://www.scopus.com/authid/detail.url?authorId=6602715796

FORMAZIONE

1997 Laurea v.o. in Ignegneria Elettronica, indirizzo Calcolatori Elettronici, conseguita presso l'Università di Palermo con la valutazione di 110/110 e lode

2000 Dottorato di Ricerca in Elettronica, Informatica e Telecomunicazioni, conseguita presso l'Università di Palermo

INCARICHI E RUOLI RICOPERTI

1999-2000 Visiting scientist presso il laboratorio di "Speech and Vision Recognition", Engineering Department, Cambridge University (UK), con contratto di ricerca e supervisione del prof. R. Cipolla

Dal 2001 ad oggi, ricercatore a t.i., dell'Istituto di Calcolo e Reti ad Alte Prestazioni del Consiglio Nazionale delle Ricerche ICAR-CNR

1997-2005 Professore a contratto di vari corsi di laurea dell'Università di Palermo (Fondamenti di Informatica, Laboratorio di Informatica Elaborazione delle Immagini Digitali, Trattamento e Compressione di Dati Multimediali)

Dal 2002 to 2016 correlatore di 45 tesi dell'Università di Palermo, Facoltà di Ingegneria Informatica

2004-2009 Coordinatore del gruppo di ricerca dell'ICAR-CNR F.A.C.I.L.E. (Cognitive Agents based Framework for the management and fruition of sensorial data, knowledge, and advanced services), compost da un staff di 6 ricercatori a t.i.

2009-2013 Coordinatore dell'area di riceirca "Grid and High Performance Computing" del Dipartimento ICT

del CNR, network di 42 ricercatori di vari istituti del CNR

2016-2019 Responsabile del laboratorio ICAR-CNR di Cognitive Robotics and Social Sensing, composto da uno staff di 10 ricercatori t.i.

2019-ad oggi coordinatore del nodo CNR Sicilia del centro di competenza ARTES 4.0 (Advanced Robotics and enabling digital TEchnologies & Systems 4.0), vice-coordinatore del macronodo CNR (Pisa, Firenze, Palermo)

PROGETTI DI RICERCA

In corso

Dal 15/01/2020 VALUE, all'Azione 1.1.5 del PO FESR Sicilia 2014/2020

Dal 16/04/2019 ARTES 4.0, Centro di Competenza ARTES 4.0 (Advanced Robotics and enabling digital TEchnologies & Systems 4.0),

Dal 15/05/2018 AMICO Assistenza Medicale In COntextual awareness, sull'Avviso PON "RICERCA E INNOVAZIONE" 2014 - 2020

Conclusi

Dal 2017 al 2019. Avviso 11/2017 Rafforzare l'occupabilità nel sistema della R&S e la nascita di Spin off di ricerca in Sicilia finanziamento per € 524.676,92 per l'intervento avente per Titolo" Corso di Formazione post laurea per Progettisti e Sviluppatori di Applicazioni ICT per SMART-CITIES"

Dal 01/09/2011 al 31/10/2015. A smart DNA sequencing platform for genomic analysis and personalized medicine for cancer and genetic diseases. Scientific responsible of CNR research. Design of the software interface of the robotic platform performing automatic operations to execute DNA amplification for sequencing. € 357.818,56 (2.947.593,5). MISE – Ministry of Economic Development, Italy.

Dal 03/10/2011 al 02/04/2014. Innovative Document Sharing. Scientific Responsible of Work Package. Automatic classification of documents by image processing. € 497.536,66 (€ 973.962,75). Regione Sicilia (Sicily Region Administrative Department).

From 01/10/2009 to 31/03/2013 IMPULSO - Integrated Multimodal Platform for Urban and extra urban Logistic System Optimization. Member of the research unit. Path planning of AGVs (Automated Ground Vehicles) movement. € 44.898. MIUR-Ministry of University and Research.

Dal 01/12/2011 la 31/03/2013 INSYEME - INtegrated SYstem for EMErgency. Member of the research unit. Methodologies of data fusion for decision support systems. € 275.250 (€ 5.092.000). MIUR-Ministry of University and Research.

Dal 15/02/2010 al 14/02/2011, ICT-E3, ICT Program for the Excellence in the field of production innovation from marine research in Western Sicilia. Dynamic localization of ships by triangulation of radio signals. Member of the research unit. € 130.000 (€ 6.069.092). MIUR-Ministry of University and Research.

Dal 01/04/2007 al 31/03/2011. FRASI- FRamework for Agent-based Semantic-aware Interoperability. Scientific Responsible of Work Package. User modelling by recognition and detection of human gaze movements. € 62.760 (€ 4.038.206). MIUR- Ministry of University and Research.

Dal 18/12/2006 al 07/08/2008. Postgraduate program for young researchers in the field of ICT. Responsible of learning and tutoring activities. € 98.484 (€ 689.500). Regione Sicilia (Sicily Region Administrative Department).

Dal 26/06/2006 al 25/06/2008. TOCAI.IT -Knowledge oriented technologies for enterprise integration in Internet. Scientific Responsible of Work Package. LSA (Latent Semantic Analysis) methodologies for automatic enrichment of ontologies. € 29.324. MIUR- Ministry of University and Research.

Dal 16/10/2002 al 28/02/2006. Te.S.C.He.T.- A Technology System for Cultural Heritage in Tourism. Scientific Responsible of Work Package. 3D reconstruction of architectural sites from uncalibrated images and map. € 50.000. MIUR-Ministry of University and Research. Partners: Engineering Ingegneria Informatica, ISUFI University of Salento, Telecom Italia LAB.

Dal 23/02/2004 al 23/06/2004, Local Network Infrastructure of the branch of Palermo of ICAR-CNR, Software and hardware setting to support research in the field of artificial vision and robotics . Member of the research unit. MIUR-Ministry of University and Research. € 37.106 (€ 203.689,2).

Dal 23/02/2004 al 23/06/2004, SUPER Space Unmanned Planetary Exploration Rovers. Member of the research unit. Design of a high level vision module for the rover. € 15.000. Italian Space Agency (ASI).

Dal 30/06/2002 to 30/06/2004: RoboCare – Multi-agent system which generates user services for human assistance. Member of the research unit. Design of the human-robot interface. € 40.000. MIUR-Ministry of University and Research.

Dal 01/07/2001 to 31/07/2003 Efficient algorithms for automatic recognition of objects in International Space Station by robotic vision. 3D reconstruction of SPIDER arm movements from images. Member of the research unit. € 51.645,69 Italian Space Agency (ASI)

BREVETTI

M. Cossentino, I. Infantino, M. Bordin, C. Lodato, S. Lopes, P. Ribino, R. Rizzo, Lost Container Detection

System (LostCoDeS), Italian Pending Patent n. RM2013A000628

PUBBLICAZIONI RILEVANTI

- Augello, E. Cipolla, I. Infantino, A. Manfré, G. Pilato, F. Vella, “Social signs processing in a cognitive architecture for an humanoid robot”, Procedia Computer Science 123, pp. 63-68, 2018.
- Augello, I. Infantino, U. Maniscalco, G. Pilato, F. Vella, “Robot Inner Perception Capability Through a Soft Somatosensory System”, International Journal of Semantic Computing 12 (01), pp. 59-87, 2018.
- G. Città, S. Arnab, A. Augello, M. Gentile, S. I. Zielonka, D. Ifenthaler, I. Infantino, D. La Guardia, A. Manfrè, A. Allegra,“Move Your Mind: Creative Dancing Humanoids as Support to STEAM Activities”, Intelligent Interactive Multimedia Systems and Services 2017 76, 190, 2017.
- F Vella, I Infantino, G Scardino, “Person identification through entropy oriented mean shift clustering of human gaze patterns”, Multimedia Tools and Applications 76 (2), 2289-2313, 2017
- Augello, I Infantino, A Manfrè, G Pilato, F Vella, A Chella, “Creation and cognition for humanoid live dancing”, Robotics and Autonomous Systems, vol. 88, pp107-114, 2016
- Manfré, A Augello, G Pilato, F Vella, I Infantino, “Exploiting interactive genetic algorithms for creative humanoid dancing”, Biologically Inspired Cognitive Architectures 17, 12-21, 2016
- A .Augello, I Infantino, A Manfré, G Pilato, F Vella, “Analyzing and discussing primary creative traits of a robotic artist”, Biologically Inspired Cognitive Architectures 17, 22-31, 2016
- Augello, I Infantino, A Lieto, G Pilato, R Rizzo, F Vella, “Artwork creation by a cognitive architecture integrating computational creativity and dual process approaches”, Biologically Inspired Cognitive Architectures , vol 15, pp. 74-86,2016

- Manfrè, I Infantino, F Vella, S Gaglio, “An automatic system for humanoid dance creation”, Biologically Inspired Cognitive Architectures vol.15, pp.1-9, 2016
- F Vella, I Infantino, G Scardino, “Person identification through entropy oriented mean shift clustering of human gaze patterns”, Multimedia Tools and Applications, pp. 1-25, 2016
- A Augello, I Infantino, G Pilato, R Rizzo, F Vella, “Creativity evaluation in a cognitive architecture”, Biologically Inspired Cognitive Architectures, vol 11, pp. 29-37, 2015
- A Augello, I Infantino, G Pilato, R Rizzo, F Vella, “Binding representational spaces of colors and emotions for creativity”, Biologically Inspired Cognitive Architectures, vol. 5, pp. 64-71, 2013
- I Infantino, G Pilato, R Rizzo, F Vella, “Humanoid introspection: A practical approach”, International Journal of Advanced Robotic Systems vol 10, 2013
- Infantino, F. Vella, G. Spoto, S. Gaglio, “bi-SIFT: Towards a semantically relevant local descriptor”, Journal of Multimedia Processing and Technologies, vol.1, issue 1, pp. 63-73, 2010.
- Chella, H.Dindo, I. Infantino, “Cognitive approach to goal-level imitation”, Interaction Studies: Social Behaviour and Communication in Biological and Artificial Systems, vol. 9, n. 2, pp. 301-318, 2008. [2010 Impact Factor: 0.733 - ISSN:1572-0373]
- Infantino, R. Rizzo, S. Gaglio, “A framework for sign language sentence recognition by commo sense context”, IEEE Transactions on Systems, Man, and Cybernetics: Part C, vol. 37, issue 5, pp. 1034-1039, 2007.
- Chella, H. Dindo, I. Infantino, “Imitation Learning and Anchoring through Conceptual Spaces”, Applied Artificial Intelligence, vol. 21, issue 4 &5, pp. 343-359, 2007 (articolo invitato).
- Chella, H. Dindo, I. Infantino, “A Cognitive Framework for Imitation Learning”, Robotics and Autonomous Systems, special issue on “Robot Programming by Demonstration”, vol. 54, n.5, pp. 403-408, 2006.
- Infantino, A. Chella, H. Dindo, “A Cognitive Architecture for Robotic Hand Posture Learning”, IEEE Transactions on Systems, Man, and Cybernetics: Part C, vol. 35, n.1, pp. 42-52, 2005.
- Chella, H. Dindo, I. Infantino, I. Macaluso, “A Posture Sequence Learning System for an Anthropomorphic Robotic Hand”, Robotics and Autonomous Systems, special issue on "Robot Learning by Demonstration", vol. 47, n. 2-3 pp. 143-152, 2004
- Infantino, R. Cipolla, A. Chella, "Reconstruction of architectural scenes from uncalibrated photos and maps", IEICE -Transaction on Information and System, special issue on "Machine Vision Applications", vol. E84-D, n.12 pp.1620-1625,
- R. Pirrone, I. Infantino, D. Guarino, A. Chella, “A Vision System for Symbolic Interpretation of Dynamic Scenes Using ARSOM”, Applied Artificial Intelligence, special issue on "Machine Learning in Computer Vision", vol.15, n.8, pp. 723-734,2001.

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