Francesco Nori

Researcher in Robotics

Curriculum synopsis

Bibliometric indexes	Major indicators: (1) h-index: 8 on Web of Science, 11 on Scopus, 19 on Google scholar citations; (2) citations: $\sim$ 180 on Web of Science, $\sim$ 500 on Scopus, $\sim$ 1500 on Google scholar citations; (3) more than 80 publications on major international journals, conference proceedings and book chapters; (4) 18 publications on relevant international journals.
Funds raising	EC grants fund rising for approximately 1.7 million euros: (1) coordinator of the EC grant CoDyCo; (2) principal investigator in the EC grant Koroibot; (3) direct involvement in Marie-Curie international training networks: RObоTAsk, PACE, SECURE and RobotDoC; (4) formal involvement in EC grants: VIACTORS, ITALK and ROBOSKIN.
Research multidisciplinarity	Multidisciplinary research career based on the two underpinning and intertwined goals: (1) designing robots and algorithms for dynamic tasks execution; (2) advancing the current understanding of human motor control in performing complex motor tasks.
Technology development	Major contributor with Giorgio Metta and Lorenzo Natale to the iCub humanoid robot development, with specific focus on compliant motion control. Contributor to the iCub dissemination at more than thirty international events. Sustainer of the iCub community by raising funds to build two copies of the iCub, donated to the University of Heidelberg, Prof. Katja Mombaur, and to the Technical University of Darmstadt, Prof. Jan Peters.
Teaching and mentoring	Frontal teaching activities for approximately 300 hours. Formal involvement either as teaching assistant or as a professor in teaching assignment at the University of Padova and at the University of Genoa. Mentoring of more than ten Ph.D. candidates of the Ph.D. program in Bioengineering and robotics at the University of Genoa.
International experience and visibility	(1) Visiting student at the UCLA VisionLab, University of California, Los Angeles; (2) three-times one-month invited professor at international research centers; (3) involvement in more than 20 international workshops as organiser and speaker.

Brief biography

Francesco Nori is a researcher in robotics at the Istituto Italiano di Tecnologia. He received his D.Ing. degree (highest honours) and Ph.D. in control theory from the University of Padova, Italy. He has been visiting student at the University of California Los Angeles (UCLA) and visiting professor at Université Pierre et Marie Curie (UPMC).

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Francesco Nori has been one of the main developers of the iCub robot with specific focus on compliant motion control. During the last years he has been involved in several European projects as key investigator, principal investigator and coordinator.

Scientific contributions

Francesco Nori has been working on research topics related to motion planning, torque control, (active and passive) compliant actuation, whole-body motion control and physical interaction control. Part of his research activities have been dedicated to human motion analysis, trying to find common principles in human and humanoid motion control leveraging on tools such as stochastic calculus, optimal control and dynamic models of articulated structures.

Identifying information

Birth	**Novermber 5^{th}, 1976**	Padova, Italy
Job Title	**Researcher in robotics**	
Phone	**+ 39 349 66 51 555**	
Email	**francesco.nori@iit.it**	
Web	**http://people.liralab.it/iron**	
Home Address	**Via Leonardo Cocito 9, 16145** Genova, Italy	

Education

Title	**M.Sc. in computer science**	
Institution	**University of Padova**	Italy
Period	September 1996 — May 2001	
	Master degree in automatic control, with highest honors (110/110 summa cum laude) at the University of Padova, Italy. Thesis: tracking of the human body pose from video sequences. Advisors: Prof. Ruggero Frezza, University of Padova, Italy and Prof. Stefano Soatto, University of California, Los Angeles, United States of America.	
Title	**Ph.D. in control theory**	
Institution	**University of Padova**	Italy
Period	January 2002 — April 2005	
	Ph.D. in automatic control, at the laboratory for computational vision and autonomous navigation (NavLab), University of Padova, Italy. Thesis: symbolic control with biologically inspired motion primitives. Advisor: Prof. Ruggero Frezza.	

Professional experience

Job	**Postdoctoral researcher in robotics**	
Institution	**University of Genoa**	Italy
Period	May 2005 — October 2006	

Postdoctoral researcher at the laboratory for integrated advanced robotics (LIRA-Lab), University of Genoa, Italy. Supervisors: Prof. Giulio Sandini and Prof. Giorgio Metta, University of Genoa, Italy.

Job	**Team leader and researcher**
Institution	**Istituto Italiano di Tecnologia** Italy
Period	November 2006 — Present

Team leader at the cognitive humanoids laboratory of the Robotics, Brain and Cognitive Sciences (RBCS) Department, Istituto Italiano di Tecnologia (IIT), Genoa, Italy.

International experience

Experience	**Visiting student**
Institution	**University of California, Los Angeles** United States
Period	January 2001 — April 2001

Visiting student at the UCLA VisionLab. Project description: human marker-less motion capture. Project supervisor: Prof. Stefano Soatto, University of California, Los Angeles.

Experience	**Invited professor**
Institution	**University Pierre et Marie Curie, Paris** France
Period	June 2013

Invited professor at the Institut des Systèmes Intelligents et de Robotique, University Pierre et Marie Curie, Paris, France. Inviting professors: Prof. Vincent Padois and Prof. Olivier Sigaud, Institut des Systèmes Intelligents et de Robotique, University Pierre et Marie Curie.

Experience	**Invited professor**
Institution	**University Paris Sud 11, Paris** France
Period	June 2015 — July 2015

Invited professor at the CIAMS laboratory in the Motor Control and perception team, University Paris-Sud 11, Paris, France. Inviting professors: Prof. Bastien Berret, University Paris-Sud 11 and Prof. Frédéric Jean, ENSTA Paris-Tech, Unité de Mathématiques Appliquées.

Experience	**Invited professor**
Institution	**Institut National de Recherche en Informatique et Automatique (INRIA)** France
Period	December 2015

Invited professor at the INRIA Nancy Grand-Est (France). Inviting researchers: Dr. Serena Ivaldi, INRIA Nancy Grand-Est and Prof. François Charpillet, directeur de recherche at INRIA.

Selected publications

1. Francesco Nori and R. Frezza. A control theory approach to the analysis and synthesis of the experimentally observed motion primitives. *Biological Cybernetics*, 93(5):323–342, 2005.

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2. G. Metta, L. Natale, Francesco Nori, G. Sandini, D. Vernon, L. Fadiga, C. von Hofsten, K. Rosander, M. Lopes, J. Santos-Victor, A. Bernardino, and L. Montesano. The icub humanoid robot : An open-systems platform for research in cognitive development. *Neural Networks*, 23(8-9):1125–1134, 2010.

3. M. Fumagalli, S. Ivaldi, M. Randazzo, L. Natale, G. Metta, G. Sandini, and Francesco Nori. Force feedback exploiting tactile and proximal force/torque sensing - theory and implementation on the humanoid robot icub. *Auton. Robots*, 33(4):381–398, 2012.

4. A. Del Prete, Francesco Nori, G. Metta, and L. Natale. Prioritized Motion-Force Control of Constrained Fully-Actuated Robots: "Task Space Inverse Dynamics". *Robotics and Autonomous Systems*, 63(1):150–157, January 2015.

5. Francesco Nori, S. Traversaro, J. Eljaik, F. Romano, A. Del Prete, and D. Pucci. icub whole-body control through force regulation on rigid noncoplanar contacts. *Frontiers in Robotics and AI*, 2(6), 2015.

Grants received

CoDyCo
project coordinator

EU funded FP-7 project (ICT-2011-9 project number 600716, http://www.codyco.eu). Project related activities: consortium coordinator and IIT principal investigator. Project details: small or medium scale focused research project (STREP). Total EC contribution: 910,015 € (on a total budget of 3,175,000 €). Duration: 4 years [May 2013 — February 2017].

Koroibot
principal investigator

EU funded FP-7 project (ICT-2013-10 project number 611909). Project related activities: IIT principal investigator. Project details: small or medium scale focused research project (STREP). EC contribution: 577,649 € (on a total budget of 4,160,000 €). Duration: 3 years [October 2013 — September 2016].

RoboTAsk
scientist in charge

EU funded FP-7 project (FP7-PEOPLE-2013-IEF project number 624424). Project related activities: scientist in charge (i.e. supervisor at the host institution). Project researcher: Dr. Francesca Stramandinoli. Project details: Marie Curie intra-European fellowships for career development (IEF). EC contribution: 179,739 €. Duration: 2 years [November 2014 — October 2016].

PACE
main developer

EU funded H2020 project (H2020-MSCA-ITN-2014). Project related activity: main developer with Dr. Monica Gori and Dr. Gabriel Baud-Bovy. Principal investigator: Prof. Giulio Sandini. Project details: Marie Curie action, initial training network (ITN). EC contribution: 516,123 €. Duration: 4 years [starting date yet to be defined].

SECURE

EU funded H2020 project (H2020-MSCA-ITN-2014).

main developer	Project related activity: main developer. Principal investigator: Prof. Giorgio Metta. Project details: Marie Curie action, initial training network (ITN). EC contribution: t.b.d. €. Duration: 3 years [starting date yet to be defined].
ITALK **main developer**	EU funded FP-7 project (FP7-ICT-2007-1 project number 214668). Project related activities: main developer. Project principal investigator: Prof. Giorgio Metta. Project details: integrated project (IP). EC contribution: 826,800 €. Duration: 4 years [March 2008 — February 2012].
ROBOSKIN **main developer**	EU funded FP-7 project (FP7-ICT-2007-3 project number 231500). Project related activities: main developer. Project principal investigator: Prof. Giorgio Metta. Project details: integrated project (IP). EC contribution: 475,380 €. Duration: 3 years [May 2009 — April 2012].
VIACTORS **staff member**	EU funded FP-7 project (FP7-ICT-2007-3 project number 231554). Project related activities: department activity coordinator. Project details: small or medium scale focused research project (STREP). EC contribution: 188,396 €. Duration: 3 years [February 2009 — January 2012].
RobotDoC **staff member**	EU funded FP-7 project (FP7-PEOPLE-ITN-2008 project number 235065). Project related activities: staff member and Ph.D. students co-supervisor. Project details: small or medium scale focused research project (STREP). EC contribution: 3,492,830 €. Duration: 5 years [September 2009 — September 2014].

Selected invited talks

- October 2014. Invited speaker at the Journées Nationales du GdR Robotique 2014, held at Grand amphithéâtre du Centre Arts et Métiers ParisTech, 151-155 boulevard de l'Hôpital, 75013 Paris. 30 October 2014.
- April 2009. Invited speaker at the exploratory workshop on "Modularity for versatile motor learning". Funded by the European Science Foundation. Convened by: Andrea D'Avella (IT), Etienne Burdet (UK), Auke Ijspeert (CH). Location: Certaldo (Italy), 8-11 April 2009.

Selected organised international events

- July 2015. Organisation of the workshop at RSS 2015 (Robotics, Science and Systems). July 13-17 2015, Sapienza University Rome. "Towards a unifying framework for whole-body and manipulation control". Coordinators: Francesco Nori, Maximo A. Roa, Daniele Pucci, Edoardo Farnioli, Marco Gabiccini, Antonio Bicchi.

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- June 2014. Organisation of the workshop "iCub & friends" celebration of the 10th anniversary of the iCub project. Workshop at the IEEE International Conference in Robotics and Automation (ICRA 2014). Hong Kong, June 5th 2014. Organisers: L. Natale, F.Nori, N. Tsagarakis, G. Metta.
- October 2012. Organisation of the workshop on "Optimality Principles and Adaptation in Humanoid Robotic Control" at the IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS 2012). Vilamoura, Algarve, Portugal. Organisers: Serena Ivaldi, Bastien Berret, Francesco Nori, Olivier Sigaud.

International patents

Patent	**Variable-stiffness actuator with passive disturbance rejection**
Type	**European patent application**
Number	**EP 13785613.4**
Date	**August 23, 2013**
Inventors	F. Nori, B. Berret, L. Fiorio, A. Parmiggiani, G. Sandini

A novel type of variable stiffness actuator (VSA) for actuating a robot joint. The actuator possesses a fundamental feature, nominally the ability to augment passive disturbance rejection.

Editorial activities

Year	Journal/Conference	Role
2011	First joint IEEE international conference on development and learning and on epigenetic robotics (ICDL-EPIROB 2011). 24-27 August 2011.	Publication chair
2012 - Present	International journal Humanoid Robotics (IJHR).	Editor
2014 - Present	Frontiers in Robotics and AI, "Humanoid robotics".	Associate editor
2014	Fourth joint IEEE international conference on development and learning and on epigenetic robotics (ICDL-EPIROB 2014). 13-16 Octboer 2014.	Publication chair

Teaching experience

Course	**Linear and nonlinear control theory**
Level	**Ph.D. candidates at the Istituto Italiano di Tecnologia**
Period	**2007 — Present**
Institution	**Università degli studi di Genova** Italy
Duration	**∼ 50 hours of frontal teaching**

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Role: main teacher. Topics: linear and nonlinear systems, Lyapunov stability, feedback control, optimal control, calculus of variations, linear quadratic regulator. Total hours of lecture: November-December 2014 (16 hours); July 2013 (10 hours); July 2011 (10 hours); October 2009 (10 hours); June 2007 (10 hours).

Course	**Robotica antropomorfa (anthropomorphic robots)**
Level	**M.Sc. candidates**
Period	**2007 — 2013**
Institution	**Università degli studi di Genova** Italy
Duration	**∼ 200 hours of frontal teaching**

Role: main teacher. Topics: calculus of variations, linear and non-linear optimal control, Newtonian and Lagrangian mechanics, forward/inverse kinematics and dynamics, position, force, impedance and hybrid control, manipulation constraints and modelling. Total hours of lecture: first semester 2007/2008 (25 hours); first semester 2008/2009 (25 hours); first and second semester 2009/2010 (50 hours); first semester 2010/2011 (50 hours); second semester 2010/2011 (50 hours); second semester 2012/2013 (30 hours).

Course	**Controllo digitale (basics in automation)**
Level	**B.Sc. candidates**
Period	**2002 — 2005**
Institution	**Università degli studi di Padova** Italy
Duration	**∼ 20 hours of frontal teaching**

Role: teaching assistant. Total hours of lecture: second semester 2002/2003 (14 hours); first semester 2004/2005 (10 hours).

Course	**Fondamenti di automatica (basics in automation)**
Level	**B.Sc. candidates**
Period	**2001 — 2003**
Institution	**Università degli studi di Padova** Italy
Duration	**∼ 20 hours of frontal teaching**

Role: teaching assistant. Total hours of lecture: second semester 2001/2002 (12 hours); first semester 2002/2003 (6 hours).

Selected mentoring activities

Ph.D. Student	**Alessandra Sciutti**
Period	**2007—2010**

Currently researcher at the Istituto Italiano di Tecnologia, Robotics, Brain and Cognitive Sciences Department (RBCS), working with of Prof. Giulio Sandini.

Ph.D. Student	**Matteo Fumagalli**
Period	**2007—2011**

Currently post doctoral researcher at the University of Twente (Netherlands), working with Prof. Stefano Stramigioli.

Ph.D. Student	**Serena Ivaldi (co-supervision with Giorgio Metta)**
Period	**2007—2011**

Currently CR2 researcher in INRIA Nancy Grand-Est (France), working in the project-team LARSEN, directed by Francois Charpillet.

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Ph.D. Student	**Andrea Del Prete (co-supervision with Lorenzo Natale)**
Period	**2010—2013**
	Currently post doctoral researcher at LAAS-CNRS in Toulouse (France), working in the Gepetto Team, with Nicolas Mansard.

References

- Prof. Giulio Sandini, director of the Robotics Brain and Cognitive Sciences Department, Genoa. Address: Viale Morego 30, 16163 Genoa, Italy. Telephone: + 39 010 71781 416. ✉: giulio.sandini@iit.it.
- Prof. Giorgio Metta, director of the iCub Facility, Fondazione Istituto Italiano di Tecnologia. Address: Via Morego 30, 16163 Genoa, Italy. Telephone: + 39 010 71781 416. ✉: giorgio.metta@iit.it.
- Prof. Ruggero Frezza, Department of Information Engineering, University of Padova. Address: Via Gradenigo 6/B, 35131 Padova, Italy. Telephone: +39 049 827 7704. Fax: +39 049 827 7699. ✉: frezza@dei.unipd.it.
- Prof. Stefano Soatto, Computer Science Department, University of California, Los Angeles Address: Boelter hall 3531d Los Angeles, CA 90095-1596. Telephone: (310) 825-4840. Assistant: +1 (310) 825-1322. ✉: soatto@cs.ucla.edu.

Languages

	speaking	listening	writing	reading
Italian	Mother tongue	Mother tongue	Mother tongue	Mother tongue
English	Fluent	Good	Fluent	Good[†]

[†]Francesco Nori contributed to the translation from English to Italian of the textbook "Feedback Control of Dynamic Systems". Authors: Gene F. Franklin J. David Powell Abbas Emami-Naeini. Publisher: Prentice Hall. Translation: "Controllo a retroazione di sistemi dinamici", edited by EdiSES.

Complete list of invited talks

1. November 2014. Invited talk at the "Cognitive Humanoid Robotics Research"workshop, held within the 2014 IEEE-RAS international conference on humanoid robots (Humanoids 2014). Madrid, Spain. Organisers: T. Asfour, A. Bajart, C. Huet, F. Mastroddi, G. Metta.

2. October 2014. Invited speaker at the Journées Nationales du GdR Robotique 2014, held at Grand amphithéâtre du Centre Arts et Métiers ParisTech, 151-155 boulevard de l'Hôpital, 75013 Paris. 30 October 2014.

3. September 2014. Invited teacher at the first KoroiBot Summer School, held in Heidelberg from September 22nd to September 26th 2014.

4. September 2014. Invited talk at the workshop on "Whole-body Control for Robots in the Real World". IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS 2014) . Organizers: F.L. Moro, M. Gienger, O. Khatib, E. Yoshida.

5. November 2013. Invited talk at the tutorial on "Online and Offline Optimization for Humanoid Robots"at the IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS 2013). Tokyo, Japan. Organizers: Eiichi Yoshida, Katja Mombaur, Tom Erez, Yuval Tassa.

6. November 2013. Invited talk at the tutorial on "Robotics-based Methods for the Identification, Recognition, and Synthesis of Human Motions"at the IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS 2013). Tokyo, Japan. Organizers: Emel Demircan, Gentiane Venture.

7. May 2013. Invited talk at the workshop on "Whole-body Compliant Dynamical Contacts for Humanoid Robotics"at the 2013 IEEE International Conference on Robotics and Automation (ICRA 2013), Karlsruhe, Germany.

8. November 2012. Invited talk at Robotica 2012. Milano, fiera Milano Rho. Title of the talk: "Controllo e interazione di iCub". Padiglione 8, Sala Asimov. Title of the sessions: "Testa e corpo di iCub".

9. November 2012. Invited talk at the workshop on "Generating Optimal Paths in Humanoid and Industrial Robotics"at Humanoids 2012, 2012 IEEE-RAS International Conference on Humanoid Robots (HUMANOIDS 2012). Business Innovation Center Osaka, Japan. Title of the talk: "Stochastic optimal control for planning movements with Variable Impedance Actuators".

10. June 2012. Invited talk at the "Modeling Locomotion of Humans and Humanoids"organized jointly with the IEEE International Conference on Biomedical Robotics and Biomechatronics. Location: Rome, Italy, 24-27 June 2012.

11. September 2011. Invited talk at the "iCub & locomotion workshop"organized jointly with CLAWAR 2011, 14th International Conference on Climbing and Robots and Support Technologies for Mobile Machines. Location: Paris, France, 6-8 September 2011.

12. September 2011. Invited talk at the "Dynamic Models and Optimal Control of Humanoid Robots workshop"organized jointly with the 11th IEEE-RAS International Conference on Humanoid Robots. Location: Bled, Slovenia, 26-28 September 2011.

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13. November 2009. Invited talk at the event: "Il mio amico robot". Funded by SIRI (Associazione Italiana di Robotica) whitin the Hi Tech Expo 2010. Milano, Centro Congressi, November 26, 2009.

14. April 2009. Invited speaker at the exploratory workshop on "Modularity for versatile motor learning". Funded by the European Science Foundation. Convened by: Andrea D'Avella (IT), Etienne Burdet (UK), Auke Ijspeert (CH). Location: Certaldo (Italy), 8-11 April 2009.

15. June 2006. Invited speaker at the 4th European School of Neuro-IT and Neuroengineering, University of Genoa, Italy. Title of the lecture: "Adaptive combination of motor primitives".

Complete list of organised international events

1. July 2015. Organisation of the workshop at RSS 2015 (Robotics, Science and Systems). July 13-17 2015, Sapienza University Rome. "Towards a unifying framework for whole-body and manipulation control". Coordinators: Francesco Nori, Maximo A. Roa, Daniele Pucci, Edoardo Farnioli, Marco Gabiccini, Antonio Bicchi.

2. November 2014. Organisation of the workshop "One day with a humanoid robot: a crash course on the iCub software tools". Workshop held at the 2014 IEEE-RAS international conference on humanoid robots (Humanoids 2014). Organisers: L. Natale, F.Nori, U. Pattacini, V. Tikhanoff, M. Randazzo, G. Metta.

3. July 2014. Organiser of the iCub summer school (Veni Vidi Vici 2014). The school was held in Sestri Levante, Italy, July 21-30 2014. Main organisers and instructors: Giorgio Metta, Lorenzo Natale, Francesco Nori, Vadim Tikhanoff, Ugo Pattacini.

4. June 2014. Organisation of the workshop "iCub & friends" celebration of the 10th anniversary of the iCub project. Workshop at the IEEE International Conference in Robotics and Automation (ICRA 2014). Hong Kong, June 5th 2014. Organisers: L. Natale, F.Nori, N. Tsagarakis, G. Metta.

5. November 2013. Organisation of the workshop on "Towards Social Humanoid Robots: What makes interaction human-like?" at the IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS 2013). Tokyo, Japan. Organisers: Lorenzo Jamone, Alessandra Sciutti, Francesco Nori, Alexandre Bernardino, Giulio Sandini.

6. July 2013. Organiser of the iCub summer school (Veni Vidi Vici 2013). The school was held in Sestri Levante, Italy, July 15-24 2013. Main organisers and instructors: Giorgio Metta, Lorenzo Natale, Francesco Nori, Vadim Tikhanoff, Ugo Pattacini, Paul Fitzpatrick.

7. October 2012. Organisation of the workshop on "Optimality Principles and Adaptation in Humanoid Robotic Control" at the IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS 2012). Vilamoura, Algarve, Portugal. Organisers: Serena Ivaldi, Bastien Berret, Francesco Nori, Olivier Sigaud.

8. July 2012. Organiser of the iCub summer school (Veni Vidi Vici 2012). The school was held in Sestri Levante, Italy, July 18-27 2012. Main organisers and instructors:

Giorgio Metta, Lorenzo Natale, Francesco Nori, Alessandro Scalzo, Ugo Pattacini, Paul Fitzpatrick.

9. July 2011. Organiser of the iCub summer school (Veni Vidi Vici 2011). The school was held in Sestri Levante, Italy, July 18-28 2011. Main organisers and instructors: Giorgio Metta, Lorenzo Natale, Francesco Nori, Alessandro Scalzo, Ugo Pattacini, Paul Fitzpatrick.

10. July 2010. Organiser of the iCub summer school (Veni Vidi Vici 2010). The school was held in Sestri Levante, Italy, July 19-28 2010. Main organisers and instructors: Giorgio Metta, Lorenzo Natale, Francesco Nori, Alessandro Scalzo, Ugo Pattacini, Paul Fitzpatrick.

11. July 2009. Organiser of the iCub summer school (Veni Vidi Vici 2009). The school was held in Sestri Levante, Italy, July 20-29 2009. Main organisers and instructors: Giorgio Metta, Lorenzo Natale, Francesco Nori, Alessandro Scalzo, Ugo Pattacini, Paul Fitzpatrick.

12. July 2008. Organiser of the iCub summer school (Veni Vidi Vici 2008). The school was held in Sestri Levante, Italy, July 21-30 2008. Main organisers and instructors: Giorgio Metta, Lorenzo Natale, Francesco Nori, Alessandro Scalzo, Ugo Pattacini, Paul Fitzpatrick.

Complete list of mentoring activities

1. Lorenzo De Michieli (co-supervision with Prof. A. Pini Prato). Period: 2007—2008. Currently hired as manager of the technology transfer area at the Istituto Italiano di Tecnologia, Genoa, Italy.

2. Alessandra Sciutti. Period: 2007—2010. Currently researcher at the Istituto Italiano di Tecnologia, Robotics, Brain and Cognitive Sciences Department (RBCS), working with of Prof. Giulio Sandini.

3. Matteo Fumagalli. Period: 2007—2011. Currently post doctoral researcher at the University of Twente (Netherlands), working with Prof. Stefano Stramigioli.

4. Angelo Emanuele Fiorilla (co-supervision with Prof. Giulio Sandini). Period: 2007—2010. Currently hired as consultant by "Akka Technologies".

5. Serena Ivaldi (co-supervision with Giorgio Metta). Period: 2007—2011. Currently CR2 researcher in INRIA Nancy Grand-Est (France), working in the project-team LARSEN, directed by Francois Charpillet.

6. Ugo Pattacini. Period: 2008—2010. Currently post doctoral researcher at the iCub Facility, Istituto Italiano di Tecnologia, working with Giorgio Metta.

7. Cristiano Alessandro (co-supervision with Prof. Rolf Pfeifer). Period: 2009—2013. Currently hired as postdoctoral researcher at the Sensory-Motor Systems Laboratory, ETH Zurich.

8. Francesca Stramandinoli (co-supervision with Prof. Angelo Cangelosi). Period: 2010—2013. Currently hired as postdoctoral researcher at the Robotics, Brain and Cognitive Sciences Department, Istituto Italiano di Tecnologia, Genoa, Italy.

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9. Andrea Del Prete (co-supervision with Lorenzo Natale). Period: 2010—2013. Currently post doctoral researcher at LAAS-CNRS in Toulouse (France), working in the Gepetto Team, with Nicolas Mansard.

10. Laura Patanè (co-supervision with Alessandra Sciutti). Period: 20011—2014. Currently hired by "ab medica s.p.a." as clinical specialist for the 'da Vinci Surgical System'.

11. Luca Fiorio. Period: 2011—2015. Currently hired as postdoctoral researcher at the iCub Facility, Istituto Italiano di Tecnologia, Genoa, Italy.

Complete list of dissemination activities

1. November 25–27, 2008. icub exposition at ICT2008 (Information and Communication Technology). Lyon, France.

2. June 10–13, 2008. iCub exposition at Automatica 2008 on invitation of the European commission. Munich, Germany.

3. July 11–17, 2009. iCub exhibition at IJCAI 2009 (twenty-first International Joint Conference on Artificial Intelligence). Pasadena Conference Center, California, USA.

4. October 23–November 1, 2009. iCub exposition to a vast public during a week event held in Genoa at the "Festival della Scienza". Genova, Italy.

5. April 17–21, 2010. iCub exposition at the Hannover Messe. Hannover, Germany. Italy was the main partner country and the iCub humanoid was officially invited by the Italian Ministry of Innovation. The iCub was officially introduced to Angela Merkel.

6. April 14–18, 2010. Participation to the Campus Party Europe, Madrid, Spain. Event organised to celebrate the end of the Spanish six month Presidency of the Council of the European Union. iCub officially presented to Neelie Kroes, vice-president of the European Commission, and Cristina Garmendia, Minister for Science and Innovation for the Government of Spain.

7. May 4, 2010. Welcome ceremony to President Giorgio Napolitano at the Istituto Italiano di Tecnologia, Genoa, Italy. I have been among the organisers of the welcome ceremony to the Italian President Giorgio Napolitano. In particular, I was responsible for realizing a sequence of movements with the iCub humanoid which has been programmed to hand an IIT brochure to the president.

8. September 21–22, 2010. Participation to the event "Tutti a scuola", Palazzo del Quirinale, Roma, Italy. On explicit invitation from the organisation committee of the national school year opening ceremony, the iCub humanoid entered to the Palazzo del Quirinale where the ceremony was held.

9. March 21, 2011. Presentation of the iCub robot to a marketing delegation of FIAT Automobiles S.p.A. 21 March 2011, Torino, Italy.

10. May 4–6, 2011. Participation with the iCub to the event FET11, the European Future Technologies Conference and Exhibition, 4-6 May 2011, Budapest, Hungary. Several demonstrations were run during three entire days of conference and remarkably the Robocom exhibit won the best exhibit award.

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11. September 25–30, 2011. Participation with the iCub to IROS2011, International Conference on Intelligent Robots and Systems, , San Francisco, California.

12. November 24, 2011. Participation with the iCub to the FET Flagships Pilots Midterm Conference. Warsaw, Poland. During this event as members of the RoboCom FET-Flagship pilot we presented the recent advancement on the iCub humanoid platform with particular focus on the recently developed artificial skin.

13. December 1–4, 2011. Participation with the iCub to the Robotville Festival at the London Science Museum. London, United Kingdom. The event was exceptional in terms of exposition to the media; several television and journals visited the iCub exhibit: BBC, CNN, The Sun, Chicago Tribune and Washington Post just to cite a few.

14. January 30–February 3, 2012. iCub@MIT. iCub on the MIT campus: 46-5189. Participation to the IAP (Independent Activities Period) event with the iCub. Boston, United States of America.

15. March 28, 2012. iCub demo at the European Parliament, hosted by the Member of the European Parliament Ioannis Tsoukalas. Bruxelles, Belgium.

16. May 3–4, 2012. iCub demo at the Festival Robotique `http://festivalrobotique.epfl.ch`. Lausanne, Switzerland.

17. May 20–24, 2012. iCub demo at Automatica 2012, hosted at the Harmonic Drive (www.harmonicdrive.de) booth. Munich, Germany.

18. September 20–22, 2012. iCub demo at the eighth World Conference on the Future of Science: "Nanoscience Society". San Giorgio Maggiore, Venice, Italy.

19. November 7–9, 2012. iCub demo at Robotica 2012 (fiera Milano Rho). Milano, Italy.

20. March 19–21 2013. iCub @ Innorobo. The iCub robot was exposed at Innorobo in Lyon. The event was a joint event with the European Robotics Forum 2013. Lyon, France.

21. May 6–10, 2013. iCub @ ICRA 2013. The IIT was institutional sponsor at the 2013 IEEE International Conference on Robotics and Automation Karlsruhe. In this occasion the robot iCub performed several demos at the IIT stand for the entire five days.

22. July 15–24, 2013. iCub @ VVV 2013. The CoDyCo project sponsored the annual iCub summer school in Sestri Levante. The event was attended by most of my collaborators.

23. October 26–28, 2013. iCub @ Festival della Scienza. Exhibition: Anthropomorphic Technology. iCub has been performing several demos at the exhibition. Demos were specifically thought for kids between 5 and 10 years of age.

24. March 12–14, 2014. iCub demonstration at the EU robotics forum. Rovereto, Italy. The Istituto Italiano di Tecnologia was massively present at the European Robotics Forum 2014.

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25. June 3–6, 2014. iCub demonstration at the trade fair for automation and mechatronics (Automatica). Munich, Germany.

26. October 3–5, 2014. iCub demonstration at Maker Faire. Rome, Italy. The iCub robot was exposed at Maker Faire in Rome.

27. October 7, 2014. iCub live on national television channel (Rai 2). The iCub was presented during the tv-show "I fatti vostri" with the participation of Dr. Daniele Pucci.

28. November 18–20, 2014. iCub demonstration at the IEEE-RAS international conference on humanoid robots (Humanoids 2014), Madrid Spain. In conjunction with an organised workshop a fully functional iCub was available at the Humanoids 2014 international conference.

29. September 12–14, 2014. iCub demonstration at the Festival della comunicazione, iCub was demonstrated at the event, held in Camogli with a significant contribution from the Istituto Italiano di Tecnologia. Genova, Italy.

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