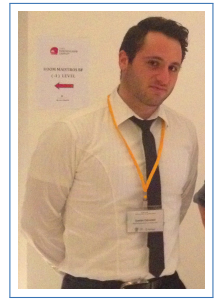# Davide Calvaresi

International Ph.D. Fellow - Curriculum Vitae

Via Roma n.221
Castel di Lama (AP) 63082, Italy
✆ +39 328 9303947
☎ +39 390505392004
✉ d.calvaresi@sssup.it
🖎 www.davidecalvaresi.it

Education

2014–Present	**International Ph.D. Fellow**, *in Emerging Digital Technologies*, curriculum: **Embedded Systems**. ReTiS Lab - TeCIP Institute, Scuola Superiore Sant'Anna, Pisa, Italy
2011 – 2014	**M.Sc. in Computer and Automation Engineering**, *Univerистà Politecnica delle Marche*, Ancona, Italy, *Italian Mark **105/110***.
Thesis	*Requirements Engineering on a Wide Domain: i* Modeling of the Ambient Assisted Living, Prof.* A. F. Dragoni, *Prof.* Eric Yu & *Prof.* Arnon Sturm - Computer Science, University of Toronto, Canada.
2005 – 2011	**B.Sc. in Computer and Automation Engineering**, *Univeristà Politecnica delle Marche*, Ancona, Italy, *Italian Mark **94/110***.
Thesis	*Study of an UPnP standard extension for the semantic description of heterogeneous devices in home automation environment, Prof.* Francesco Piazza & Dr. Michele Nucci - D.I.I., Università Politecnica delle Marche, Ancona, Italy

Work

2015–Present	**Co Founder & Project Manager**, *Wriggle Solutions s.r.l.s.*, Innovative Startup, Pisa, Italy.
2014–Present	**Organizer & Scientific Committee Member**, *"Polo Tecnico - Professionale per Domotica Assistenziale"*, Regione Marche, Italy.
2013	**Freelance Engineer**, *Design and Development of a web based product*, CarbonMill s.n.c., Jesi, Italy.
2012	**Freelance Engineer**, *Personalization of a Customer Relationship Management*, STEP s.a.s, Jesi, Italy.

Awards - Honors - Patents

14 Feb 2016	**Winner of Global Social Venture Competition 2016: Best ICT Idea Award**, *Project:"SMART Tyre".* <u>Competition</u>: *"International prize for business ideas with high social and environmental impact".*
14 Dec 2015	**Winner of EGO Ericsson 2015**, *Project:"SMART Tyre".* <u>Competition</u>: *"Change makers for a connected society".*
21 Oct 2015	**Winner of START CUP Toscana 2015**, *Project:"SMART Tyre".* <u>Competition</u>: *"Best business and high tech ideas.".*
2 Dec 2015	**Patent Pending**, *SMART Tyre, Request n.: 102015000079497.*

Skills

Technical	Web languages, C, C++, Java, Software Engineering, i* Modeling, LATEX, Office, Computer Graphics
Soft	Problem Solving, Team-Leading, Team-working, Software Engineering, Business Planning

Certifications & Licenses

2015	**High Tech Business Venturing**	*Scuola Superiore Sant'Anna & Tuscan Academy*
2015	**Inside ICT & Robotic**	*Scuola Superiore Sant'Anna & Tuscan Academy*
2004	**ECDL**	*European Computer Driving Licence - level 1*
	Driving License - B, A3	*Autovehicle, Motorbike*

Languages

Italian	**Native**	
English	**Professional working proficiency**	*C1*

Social Engagements

2014-Present	**PhD Student Representative in Academic Council**	*Scuola Superiore Sant'Anna, Pisa*
2003-Present	**Blood Donor - AVIS, Volunteer - First Aid**	
4-8 Apr 2016	**Volunteer Staff at SAC 2016 Conference: 31st ACM Symposium on Applied Computing**	*Pisa*

Hobbies

- Chess, Archery and Aeromodelism
- Running, Swimming, Gym and Hiking

- Knowledge Sharing, Science and Technology
- Cooking, Music, Movies and Operas

Abroad Experiences

July 2015	**Summer School on Health and Wellbeing (HWB)**, *EIT Digital, Philips Research Lab & Holst Center*, Eindhoven, Netherlands. Focused on assessment, measurement and promotion of mental / physical fitness and well-being. Worked with an international team to develop HWB business models, innovation routes and revenue models
June 2015	**Summer School on Cyber Physical Systems (CPS)**, *EIT ICT Lab & KTH*, Stockholm, Sweden. Focused on performing in industrial and academia environment CPS applications. Moreover, business coaching was provided throughout the summer school.
2013-2014	**Internship**, *Univeristy of Toronto*, Toronto, Canada, *Master Thesis* . Modelization of Ambient Assisted Living Domain using a Goal Oriented Requirement Engineering & *i** modeling lang

Academic Activities

2016	**[Reviewer]**, ***Journals:*** *ACM Transactions on Cyber-Physical Systems*, **Conferences:** SAC 2016, RTSS-CPS 2016.
Nov 2015	**[Lecture] Leap Motion and Real Time**, *TeCIP*, Scuola Superiore Sant'Anna,Italy. Student Projects
22 Oct 2015	**[Seminar] Distributed Data Service (DDS)**, *TeCIP*, Scuola Superiore Sant'Anna,Italy. DDS middleware and its applications in the avionics and Assistive fields with emphasis on real-time constraints.
26 Nov 2015	**[Seminar] Introduction to Agent Oriented Paradigm**, *TeCIP*, Scuola Superiore Sant'Anna,Italy. Agents concept, Multi Agent Paradigm and Software Engineering.
2015	**[Project] Silence MultiMedia**, *TeCIP*, Scuola Superiore Sant'Anna,Italy, Team member. Distributed embedded system for real time audio streaming with embedded and web management interfaces.
14 Oct 2014	**[Seminar] Requirement Engineering**, Univpm, Ancona, Italy. Goal Oriented Requirement Engineering, Multi Agent Software Engineering and Ambient Assisted Living Modelization.
10 Oct 2014	**[Seminar] Virtual Caregiver, a novel approach**, Istituto d'Istruzione Superiore E. Fermi, Italy. Overview on assistive technologies with emphasis on smart environments for elderly people.

Publications

2016	Cesarini D., **Calvaresi D.**, Farnesi C., Taddei D, Frediani S., Ungerechts B.E., & Hermann T.. *"MEDIATION: an eMbEddeD system for auditory feedback of hand-water InterAcTION while swimming"*, Proceeding of the 11th conference of the International Sports Engineering Association (ISEA 2016), Delft, Netherlands, July 11-14.
2016	Sernani P., **Calvaresi D.**, Calvaresi P., Pierdicca M., Morbidelli E., Dragoni A. F., & Buttazzo G. *"Testing Intelligent Solutions for the Ambient Assisted Living in a Simulator"*, Proceeding of the 9th International Conference on PErvasive Technologies Related to Assistive Environments (PETRA 2016), Corfu Island, Greece, June 29 - July 1.

2016 **Calvaresi D.**, Sernani P., Marinoni M., Claudi A., Balsini A., Dragoni A. F., & Buttazzo G. *"A Framework based on Real-Time OS and Multi-Agents for intelligent autonomous robot competitions"*, Proceeding of the 11th IEEE International Symposium on Industrial Embedded Systems (SIES 2016), Krakow, Poland, May 23-26.

2016 **Calvaresi D.**, Cesarini D., Sernani P., Marinoni M., Dragoni A. F., & Sturm A.. *"Exploring the ambient assisted living domain: a systematic review"*. Journal of Ambient Intelligence and Humanized Computing, 1-19.

2015 **Calvaresi D.**, Cesarini D.,Marinoni M., Buonocunto P., Bandinelli S., and Buttazzo G., *"Non-intrusive patient monitoring for supporting general practitioners in following diseases evolution"*, Proceedings of the 3rd International Work-Conference on Bioinformatics and Biomedical Engineering (IWBBIO 2015), Granada, Spain, April 15-17.

2015 Cesarini D., **Calvaresi D.**, Marinoni M., Buonocunto P., and Buttazzo G. *"Simplifying the use of motor tele-rehabilitation devices for their practical use in non-clinical environments"*, Proceedings of the 3rd International Work-Conference on Bioinformatics and Biomedical Engineering (IWBBIO 2015), Granada, Spain, April 15-17

2014 Calvaresi, P., **Calvaresi, D.**, Sernani, P., Pierdicca, M., Morbidelli E., Accattoli, D., Dragoni, A.F.: *"A Virtual Caregiver for the AAL: Testing in a 3D Simulator"*. In: Workshop of the XIII AI*IA Symposium on Artificial Intelligence (AI*AAL.it 2014).

2014 Calvaresi, P., Dragoni, A.F., Pierdicca, M., **Calvaresi, D.**, Sernani, P.: 3D Simulation for Ambient Assisted Living: Interaction through Mobile Application. In: 1st International Conference Recent Trends and Applications in Computer Science and Information Technology (RTA-CIST 2014).

2014 **Calvaresi, D.**, Sturm, A., Yu, E., Dragoni, A.F.: *"Exploring domain requirements and technology solutions: a goal modeling approach"*. In: Proceedings of the 7th International iStar Workshop (iStar 2014).

2014 **Calvaresi, D.**, Claudi, A., Dragoni, A.F., Yu, E., Accattoli, D., Sernani, P.: *"A Goal-Oriented Requirements Engineering Approach for the Ambient Assisted Living Domain"*. in Proceedings of the the 7th ACM International Conference on PErvasive Technologies Related to Assistive Environments (PETRA 2014).

2013 **Calvaresi D.**, Sturm A., and Yu E.: *"Reconciling System Design Options with Domain and Elicited Requirements - A Goal Modeling Approach"*. Poster Presentation in Consortium for Software Engineering Research, Fall 2013 Meeting, Markham, Ontario, CA, 2013.

Miscellaneous

2013 **[Project] Rabbits and Carrots**, *D.I.I*, Univpm,Italy, "presentation link", Team Leader.
Intelligent robots competition. Expertise: Real Time scheduling, Artificial Intelligence, Jade, OpenCV.

2012 **[Project] Web Application - CVRP**, *D.I.I.*, Univpm, Italy, Teamwork.
Dynamic web Capacity Vehicle Routing Problem solver. Expertise: Operational Research, AMPL, Reg Exp.

2012 **[Project] Fault Detection in a wind farm**, *D.I.I.*, Univpm, Italy, Teamwork on:.
Fault Predictions and Diagnosis in wind turbines. Expertise: Matlab, Simulink, Neural Network

2012 **[Project] Arts, an Android App**, *D.I.I.*, Univpm, Italy, Teamwork.
Mobile app which processing pictures and provide their informations. Expertise: OpenCV, Android, Java.

2011 **[Project] Hive - Enterprise application integration** , *D.I.I.*, Univpm, Italy, Team Leader.
Integration of (Kettle, SugarCRM, AlfrescoECM, OpenBravoERP) at web service level and database level.

2001–2014 **Fine dining, catering and banquet waiter**, *several restaurants*, Central Italy.
Supervisor, waiter and barman. Several tasks with different responsibility levels.

References

Person	Role	Institute	contact
○ Prof. Giorgio Buttazzo	○ PhD Supervisor	○ SSSA	○ g.buttazzo@sssup.it
○ Prof. Arnon Sturm	○ MSc Advisor	○ UofT	○ sturm@bgu.ac.il
○ Dr. Daniel Cesarini	○ PhD Tutor	○ SSSA	○ d.cesarini@sssup.it