

CONTACT INFORMATION	<p>PostDoctoral Scientist CHILI Lab - Ecole Polytechnique Federal de Lausanne</p> <p>EPFL IC ISIM CHILI RLC D1 740 (Rolex Learning Center) Station 20 CH-1015 Lausanne, SUISSE</p>	<p>Mobile : +33-6 69 69 48 16 E-mail : wafa.johal@gmail.com WWW : wafa.johal.fr</p>
RESEARCH INTERESTS	<p>I am interested in personalization using non-verbal cues of communication during Human-Robot Interaction in educational contexts. I believe that personalization of robots' behaviours will improve acceptability. I work with robots having various embodiment and try to base my models on social sciences and cognitive sciences. I also have interest in affective computing, learning, symbolic reasoning and integration of companion robots in smart homes. I have conducted child-robot interactions experiments from protocole design to data analysis.</p>	
ACADEMIA	<p>University of Grenoble Alps, Laboratory of Informatics of Grenoble - MAGMA Team France</p> <p>Ph.D. Student in Computer Sciences, October 2012 - October 2015</p> <ul style="list-style-type: none">• Thesis Topic : <i>Behavioural Styles for Human-Robot Interaction : Towards Plasticity in HRI</i>• Advisers : Prof. Sylvie Pesty & Prof. Gaëlle Calvary• Area of Study : Affective Computing, Human-Robot Interaction, Personalisation, Plasticity <p>University Joseph Fourier, Grenoble, France</p> <p>M.S., Computer Sciences : Graphics, Vision & Robotics, June 2012</p> <ul style="list-style-type: none">• Thesis Topic : <i>Multi-modal detection of intention of interaction by a companion robot</i>• Adviser : Dr. Dominique Vaufreydaz• Area of Study : Activity Recognition, Multi-modal Data Fusion <p>Pierre-Mendès France University, Grenoble, France</p> <p>B.S. B.A. Mathematics and Informatics applied to Cognitive Sciences, June 2010</p> <ul style="list-style-type: none">• <i>Topped, Summa cum Laude</i>• Mathematics : Linear Algebra, Logic, Probabilities, Statistics• Computer Sciences : Algorithms & Programming• Cognitive Sciences : Memory, Learning & Perception <p>Exchange Student for one year in Washington College, MA (U.S.A.), 2009-2010</p>	
JOURNAL PUBLICATIONS	<p>[1] Mondada F, Bonnet E., Davrajh S., Johal W. and Stopforth R.. R2T2 : Robotics to Integrate Educational Efforts in South Africa and Europe. <i>International Journal of Advanced Robotic Systems</i>, 2016.</p> <p>[2] Vaufreydaz D., Johal W., and Combe C., Starting engagement detection towards a companion robot using multimodal features, <i>Robotics and Autonomous Systems</i>, January 2015, ISSN 0921-8890.</p>	
INTERNATIONAL CONFERENCE PUBLICATIONS	<p>[3] Özgür A., Johal W. and Dillenbourg P. Permanent Magnet-Assisted Omnidirectional Ball Drive. <i>International Conference on Intelligent Robots and Systems (IROS)</i>, 2016, accepted.</p> <p>[4] Johal W., Jacq A., Paiva A. and Dillenbourg P. Child-Robot Spatial Arrangement in a Learning by Teaching Activity. <i>25th IEEE International Symposium on Robot and Human Interactive Communication</i>. August 2016. New York City, USA.</p> <p>[5] Ta VC, Johal W., Portaz M., Castelli E., Vaufreydaz D., The Grenoble system for the Social Touch Challenge at ICMI 2015. <i>International Conference on Multimodal Interaction</i>. (ICMI2015). [In accepted]</p> <p>[6] Johal W., Calvary G., Pesty S., Non-verbal Signals in HRI : Interference in Human Perception. <i>International Conference on Social Robotics</i>. (ICSR2015).</p> <p>[7] Johal W., Pellier D., Adam C., Fiorino H., Pesty S., A Cognitive and Affective Architecture for Social Human-Robot Interaction. HRI'15 Extended Abstracts. DOI=10.1145/2701973.2702006 [Award Nominee]</p> <p>[8] Johal W., Robots Interacting with Style. HRI'15 Extended Abstracts. DOI=10.1145/2701973.2702706</p> <p>[9] Johal W., Calvary G., Pesty S., Toward Companion Robots Behaving with Style. In <i>Proceedings of the 2014 IEEE International Symposium on Robot and Human Interactive Communication (ROMAN)</i>. Edinburgh. 2014. doi: 10.1109/ROMAN.2014.6926393</p> <p>[10] Johal W., Adam C., Fiorino H., Pesty S., Duhaut D.. Acceptability of a companion robot for children in daily life situations <i>5th IEEE Conference on Cognitive InfoCommunications</i>. (CogInfoCom) Nov 2014. Vietri, Italy. doi: 10.1109/CogInfoCom.2014.7020474</p>	

	<p>[11] Johal W., Calvary G. and Pesty S.. A Robot with Style because you are Worth it !. In <i>CHI '14 Extended Abstracts on Human Factors in Computing Systems</i> (CHI EA '14). Toronto, Canada. DOI=10.1145/2559206.2581229</p> <p>[12] Johal W., Dugdale J., Pesty S.. Modelling interactions in a mixed agent world. In <i>Proceeding of 25th European Modeling and Simulation Symposium</i> (EMSS). Athens, Greece, 23-25 Sept 2013</p> <p>[13] Benkaouar (Johal) W., Vaufreydaz D.. Multi-sensors engagement detection with a robot companion in a home environment. <i>Workshop on Assistance and Service Robotics in a Human Environment at IEEE International Conference on Intelligent Robots and Systems</i> (IROS2012), Vilamoura, Algarve - Portugal, oct 2012.</p>
FRENCH CONFERENCE PUBLICATIONS	<p>[14] Jacq A., Johal W. and Dillenbourg P. Non-recursive Approach for Mutual Understanding.. <i>Journée de travail sur la robotique interactive et cognitive</i>. Avril. 2016. Toulouse, France</p> <p>[15] Johal W., Pesty, S., Calvary G., Des Styles pour une Personnalisation de l'Interaction Homme-Robot. <i>Journées Nationales de la Robotique Interactive</i> (JNRI). Nov. 2014. Toulouse, France</p> <p>[16] Johal W., Pesty S. Calvary G., Les Styles pour la Plasticité des Robots Compagnons. <i>Workshop Affect, Compagnon Artificiel, Interaction</i> (WACAI) 2014. Rouen, France</p> <p>[17] Adam C., Johal W., Ben-Farhat I., Jost C., Fiorono H., Pesty S. , Duhaut D.. Acceptabilité d'un robot compagnon dans des situations de la vie quotidienne. <i>Deuxième conférence III - Intercompréhension de l'intraspécifique à l'interspécifique</i>. Lorient, 30 Sept - 1Oct 2013</p>
OTHER PUBLICATIONS	<p>[18] Jacq A., Johal W., Dillenbourg P. and Paiva A.. Cognitive Architecture for Mutual Modelling. <i>Workshop on Cognitive Architectures for Social HRI</i> (HRI'16). Christchurch, New Zealand. 2016</p> <p>[19] Johal W., Pesty S., Calvary G.. Expressing Parenting Styles with Companion Robots. <i>Workshop on Applications for Emotional Robots at Human-Robot Interaction conference</i> (HRI'14) . Bielefeld. 2014</p>
INTERN TUTORING	<p>Jérémy Lascaux, Under-Graduate Student in Computer Sciences, IUT2- UPMF. Developing an Affective Math Game with Nao Robot. Spring 2014.</p> <p>Anshul Singh Parihar, Electrical Engineering, Indian Institute of Technology, Jodhpur India Agent-Based Simulation of Human-Robot Interaction for Experiment Design. Spring 2014.</p>
TEACHING	<p>École Polytechnique Fédérale de Lausanne, Switzerland October 2015 - ...</p> <ul style="list-style-type: none"> • Visual Computing : • Vision & Graphics, AR-game project using processing and various computer vision techniques. <p>Grenoble Institute of Technology, France</p> <p><i>Teaching Assistant</i> October 2012 - July 2014</p> <ul style="list-style-type: none"> • Instructor for ACVL : Software's Analysis, Conception and Validation. <ul style="list-style-type: none"> • Methods for Requirement Analysis • Software Design Patterns • UML Diagrams and Object Constraint Language • Instructor for Introduction to Programming <ul style="list-style-type: none"> • OCaml and Python • Begining of complexity analysis <p>Pierre Mendès-France University, Grenoble, France October 2013- January 2014</p> <ul style="list-style-type: none"> • Instructor for INF f-1 : Undergraduate Beginner Programming, Lectures & Practical Sessions <p>Joseph Fourier University, Grenoble, France October 2011- January 2012</p> <ul style="list-style-type: none"> • Instructor for Biology Undergraduates : C2i, Burautic, Basic HTML, Lectures & Practical Sessions
ACADEMIC SERVICES	<p>Conferences & Events</p> <ul style="list-style-type: none"> • Organization Committee, "Workshop on Robots for Learning" @RoMan 2016, R4L. New York, USA - August 27, 2016. • Session Chair on Implicit Human-Robot Communication, RO-MAN 2016. New York, USA - August 29, 2016. • International Program Committee, International Conference on Social Robotics, ICSR 2016. Barcelona, Spain - November 2, 2016. • Member of Organization Committee, "Workshop on Social Robots in Education" @NewFriends 2016, https://socialrobotics.org/. Kansas City, USA - November 1-3, 2016. • Member of Organization Committee, "Workshop Affect, Compagnon Artificiel, Interaction ", WACAI 2012. Grenoble, France - 15 & 16 November 2012. • Member of Organization Committee, PersyCup Robotic Challenge. Grenoble, France - 21 Mai 2015.

Reviews

- *International Journal of Social Robotics*, 2016
- *IEEE Robotics and Automation Magazine (IEEE-RAM)*, 2016
- *Journal of Cognitive Systems Research*, 2016
- *Journal on Interaction Studies*, 2016
- *International Conference on Social Robotics (ICSR)*, 2015, 2016
- *International Conference on Human Robot Interaction (HRI)*, 2015, 2016
- *IEEE International Symposium on Robot and Human Interactive Communication (RO-MAN)*, 2014, 2015, 2016

LANGUAGE

- French : Mother tongue
- English : Fluent - TOEFL, 1 year in USA, Masters taught in English

REFERENCES

Prof. Sylvie Pesty (e-mail : Sylvie.Pesty@imag.fr)

AVAILABLE TO CONTACT

- Professor at [University Institute of Technology \(IUT2-UPMF\)](#),
- ◊ Member of [MAGMA Team](#), LIG-Lab
- ★ *Prof. Pesty is my supervisor for my PhD.*

Prof. Gaëlle Calvary (e-mail : Gaelle.Calvary@imag.fr)

- Professor at [Ensimag software engineering school](#) of the Grenoble Institute of Technology,
- ◊ Member of [Engineering of Computer Human Interaction Team](#), LIG-Lab
- ★ *Prof. Calvary is my co-supervisor for my PhD.*

Dr. Dominique Vaufreydaz (e-mail : Dominique.Vaufreydaz@inria.fr)

- Associate Professor at [University Pierre Mendès-France](#),
- ◊ Member of [PRIMA Team](#), INRIA & LIG-Lab
- ★ *Prof. Vaufreydaz was my supervisor during my Masters.*

MORE

INFORMATION

More information and auxiliary documents can be found at
<http://wafa.johal.fr/>.