

# Publications

Séverin Lemaignan

*h-index: 22 – Citations: 1865* (source: Google Scholar, checked on 11/07/2019)

## International peer-reviewed journals

- Senft, E., Lemaignan, S., Baxter, P., Bartlett, M., Belpaeme, T.  
**Teaching robots social autonomy from in situ human guidance**  
*Science Robotics* 2019. DOI: 10.1126/scirobotics.aat1186.
- Wallbridge, C., Lemaignan, S., Senft, E., Belpaeme, T.  
**Generating Spatial Referring Expressions in a Social Robot: Dynamic vs Non-Ambiguous**  
*Frontiers in AI and Robotics* 2019. DOI: 10.3389/frobt.2019.00067.
- Bartlett, M., Edmunds, C. E. R., Belpaeme, T., Thill, S., Lemaignan, S.  
**What Can You See? Identifying Cues on Internal States from the Kinematics of Natural Social Interactions**  
*Frontiers in AI and Robotics* 2019. DOI: 10.3389/frobt.2019.00049.
- Flook, R., Shrinah, A., Wijnen, L., Eder, K., Melhuish, C., Lemaignan, S.  
**On the Impact of Different Types of Errors on Trust in Human-Robot Interaction: Are laboratory-based HRI experiments trustworthy?**  
*Interaction Studies* 2019. DOI: 10.1075/is.18067.flo.
- Lemaignan, S., Edmunds E. R., C., Senft, E., Belpaeme, T.  
**The PInSoRo dataset: Supporting the data-driven study of child-child and child-robot social dynamics**  
*PLOS ONE* 2018. DOI: 10.1371/journal.pone.0205999.
- Senft, E., Baxter, P., Kennedy, J., Lemaignan, S., Belpaeme, T.  
**Supervised Autonomy for Online Learning in Human-Robot Interaction**  
*Pattern Recognition Letters* 2017. DOI: 10.1016/j.patrec.2017.03.015.
- Lemaignan, S., Warnier, M., Sisbot, E.A., Clodic, A., Alami, R.  
**Artificial Cognition for Social Human-Robot Interaction: An Implementation**  
*Artificial Intelligence* 2017. DOI: 10.1016/j.artint.2016.07.002.
- Lemaignan, S., Jacq, A., Hood, D., Garcia, F., Paiva, A., Dillenbourg, P.  
**Learning by Teaching a Robot: The Case of Handwriting**  
*IEEE Robotics and Automation Magazine* 2016. DOI: 10.1109/MRA.2016.2546700.
- Dillenbourg, P., Lemaignan, S., Sangin, M., Nova, N., Molinari, G.  
**The Symmetry of Partner Modelling**  
*Intl. J. of Computer-Supported Collaborative Learning* 2016. DOI: 10.1007/s11412-016-9235-5.
- Lemaignan, S.  
**Grounding the Interaction: Knowledge Management for Interactive Robots [dissertation abstract]**  
*Künstliche Intelligenz* 2013. DOI: 10.1007/s13218-013-0246-3.
- Lallée, S., Pattacini, U., Lemaignan, S., Lenz, A., Melhuish, C., Natale, L., Skachek, S., Hamann, K., Steinwender, J., Sisbot, E.A., Metta, G., Pipe, T., Alami, W., Warnier, M., Guitton, J., Warneken, F., Dominey, P.F.  
**Towards a Platform-Independent Cooperative Human-Robot Interaction System: III. An Architecture for Learning and Executing Actions and Shared Plans**  
*IEEE Transactions on Autonomous Mental Development* 2012. DOI: 10.1109/TAMD.2012.2199754.

- Lemaignan, S., Ros, R., Sisbot, E. A., Alami, R., Beetz M.  
**Grounding the Interaction: Anchoring Situated Discourse in Everyday Human-Robot Interaction**  
*International Journal of Social Robotics* 2011. DOI: 10.1007/s12369-011-0123-x.

## International peer-reviewed conference articles (6-8 pages)

- Sallami, Y., Lemaignan, S., Clodic, A., Alami, R.  
**Simulation-based physics reasoning for consistent scene estimation in an HRI context**  
*IROS* 2019.
- Winkle, K., Lemaignan, S., Caleb-Solly, P., Leonards, U., Turton, A., Bremner, P.  
**Effective Persuasion Strategies for Socially Assistive Robots**  
*HRI* 2019. DOI: 10.1109/HRI.2019.8673313.
- Wallbridge, C., van den Berghe, R., Hernández García, D., Kanero, J., Lemaignan, S., Edmunds, C., Belpaeme, T.  
**Using a Robot Peer to Encourage the Production of Spatial Concepts in a Second Language**  
*HAI* 2018. DOI: 10.1145/3284432.3284433.
- Lemaignan, S., Sallami, Y., Wallbridge, C., Clodic, A., Alami, R.  
**underworlds: Cascading Situation Assessment for Robots**  
*IROS* 2018. DOI: 10.1109/IROS.2018.8594094.
- Senft, E., Lemaignan, S., Bartlett, M., Baxter, P., Belpaeme, T.  
**Robots in the classroom: Learning to be a Good Tutor**  
*HRI – Workshop R4L ‘Robots for Learning’* 2018.
- Irfan, B., Kennedy, J., Lemaignan, S., Papadopoulos, F., Senft, E., Belpaeme, T.  
**Social psychology and Human-Robot Interaction: an Uneasy Marriage**  
*alt.HRI* 2018. DOI: 10.1145/3173386.3173389.
- Wallbridge, C., Lemaignan, S., Belpaeme, T.  
**Qualitative Review of Object Recognition Techniques for Tabletop Manipulation**  
*HAI* 2017. DOI: 10.1145/3125739.3132593.
- Senft, E., Lemaignan, S., Baxter, P., Belpaeme, T.  
**Toward Supervised Reinforcement Learning with Partial States for Social HRI**  
*AAAI Fall Symposium – AI-HRI* 2017.
- Özgür, A., Lemaignan, S., Johal, W., Beltran, M., Briod, M., Pereyre, L., Mondada, F., Dillenbourg, P.  
**Cellulo: Versatile Handheld Robots for Education**  
*HRI* 2017. DOI: 10.1145/2909824.3020247.
- Kennedy, J., Lemaignan, S., Montassier, C., Lavalade, P., Irfan, B., Papadopoulos, F., Senft, E., Belpaeme, T.  
**Child Speech Recognition in Human-Robot Interaction: Evaluations and Recommendations**  
*HRI* 2017. DOI: 10.1145/2909824.3020229.
- Chandra, S., Alves-Oliveira, P., Lemaignan, S., Sequeira, P., Paiva, A., Dillenbourg, P.  
**Children’s Peer Assessment and Self-disclosure in the Presence of an Educational Robot**  
*RoMAN* 2016. DOI: 10.1109/ROMAN.2016.7745170.
- Hostettler, L., Özgür, A., Lemaignan, S., Dillenbourg, P., Mondada, F.  
**Real-Time High-Accuracy 2D Localization with Structured Patterns**  
*ICRA* 2016. DOI: 10.1109/ICRA.2016.7487653.
- Baxter, P., Kennedy, J., Senft E., Lemaignan, S., Belpaeme, T.  
**From Characterising Three Years of HRI to Methodology and Reporting Recommendations**  
*alt.HRI* 2016. DOI: 10.1109/HRI.2016.7451777.
- Lemaignan, S., Garcia, F., Jacq, A., Dillenbourg, P.  
**From Real-time Attention Assessment to “With-me-ness” in Human-Robot Interaction**  
*HRI* 2016. DOI: 10.1109/HRI.2016.7451747.

- Jacq, A., Lemaignan, S., Garcia, F., Dillenbourg, P., Paiva, A.  
**Building Successful Long Child-Robot Interactions in a Learning Context**  
*HRI* 2016. DOI: 10.1109/HRI.2016.7451758.
- Baxter, P., Ashurst, E., Kennedy, J., Senft, E., Lemaignan, S., Belpaeme, T.  
**The Wider Supportive Role of Social Robots in the Classroom for Teachers**  
*WONDER Workshop - ICSR* 2015.
- Lemaignan, S., Fink, J., Mondada, F., Dillenbourg, P.  
**You're Doing It Wrong! Studying Unexpected Behaviors in Child-Robot Interaction**  
*ICSR* 2015. DOI: 10.1007/978-3-319-25554-5\_39.
- Lemaignan, S., Hosseini, A., Dillenbourg, P.  
**pyRobots: a Toolset for Robot Executive Control**  
*IROS* 2015. DOI: 10.1109/IROS.2015.7353769.
- Karim, M. E., Lemaignan, S., Mondada, F.  
**A Review: Can Robots Reshape K-12 STEM Education?**  
*ARSO* 2015.
- Chandra, S., Alves-Oliveira, P., Lemaignan, S., Sequeira, P., Paiva, A., Dillenbourg, P.  
**Can a Child Feel Responsible for Another in the Presence of a Robot in a Collaborative Learning Activity?**  
*RoMAN* 2015. DOI: 10.1109/ROMAN.2015.7333678.
- Lemaignan, S., Dillenbourg, P.  
**Mutual Modelling in Robotics: Inspirations for the Next Steps**  
*HRI* 2015. DOI: 10.1145/2696454.2696493.
- Hood, D., Lemaignan, S., Dillenbourg, P.  
**When Children Teach a Robot to Write: An Autonomous Teachable Humanoid Which Uses Simulated Handwriting**  
*HRI* 2015. DOI: 10.1145/2696454.2696479.
- Fink, J., Rétornaz, P., Vaussard, F., Wille, F., Franinović, K., Berthoud, A., Lemaignan, S., Dillenbourg, P., Mondada, F.  
**Which Robot Behavior Can Motivate Children to Tidy up Their Toys? Design and Evaluation of "Ranger"**  
*HRI* 2014. DOI: 10.1145/2559636.2559659.
- Lemaignan, S., Hanheide, M., Karg, M., Khambhaita, H., Kunze, L., Lier, F., Lütkebohle, I., Milliez, G.  
**Simulation and HRI - Recent Perspectives with the MORSE Simulator**  
*SIMPAR* 2014. DOI: 10.1007/978-3-319-11900-7\_2.
- Lemaignan, S., Fink, J., Dillenbourg, P., Braboszcz, C.  
**The Cognitive Correlates of Anthropomorphism**  
*Workshop A bridge between Robotics and Neuroscience - HRI* 2014.
- Lemaignan, S., Alami, R.  
**Explicit Knowledge and the Deliberative Layer: Lessons Learned**  
*IROS* 2013. DOI: 10.1109/IROS.2013.6697182.
- Echeverria, G., Lemaignan, S., Degroote, A., Lacroix, S., Karg, M., Koch, P., Lesire, C., Stinckwich, S.  
**Simulating complex robotic scenarios with MORSE**  
*SIMPAR* 2012. DOI: 10.1007/978-3-642-34327-8\_20.
- Warnier, M., Guitton, J., Lemaignan, S., Alami, R.  
**When the Robot Puts Itself in Your Shoes. Managing and Exploiting Human and Robot Beliefs**  
*RoMAN* 2012. DOI: 10.1109/ROMAN.2012.6343872.
- Alami, R., Warnier, M., Guitton, J., Lemaignan, S., Sisbot, E. A.  
**When the robot considers the human...**  
*ISRR* 2011.

- Lallée, S., Pattacini, U., Boucher, J.D., Lemaignan, S., Lenz, A., Melhuish, C., Natale, L., Skachek, S., Hamann, K., Steinwender, J., Sisbot, E.A., Metta, G., Alami, R., Warnier, M., Guitton, J., Warneken, F., Dominey, P.F.  
**Towards a Platform-Independent Cooperative Human-Robot Interaction System: II. Perception, Execution and Imitation of Goal Directed Actions**  
*IROS* 2011. DOI: 10.1109/IROS.2011.6094744.
- Lemaignan, S., Ros, R., Alami, R., Beetz, M.  
**What are you talking about? Grounding dialogue in a perspective-aware robotic architecture**  
*RoMAN* 2011. DOI: 10.1109/ROMAN.2011.6005249.
- Echeverria, G., Lassabe, N., Degroote, A., Lemaignan, S.  
**Modular Open Robots Simulation Engine: MORSE**  
*ICRA* 2011. DOI: 10.1109/ICRA.2011.5980252.
- Lemaignan, S., Ros, R., Mösenlechner, L., Alami, R., Beetz, M.  
**ORO, a Knowledge Management Module for Cognitive Architectures in Robotics**  
*IROS* 2010. DOI: 10.1109/IROS.2010.5649547.
- Ros, R., Lemaignan, S., Sisbot, E. A., Alami, R., Steinwender, J., Hamann, K., Warneken, F.  
**Which One? Grounding the Referent Based on Efficient Human-Robot Interaction**  
*RoMAN* 2010. DOI: 10.1109/ROMAN.2010.5598719.
- Lallée, S., Lemaignan, S., Lenz, A., Melhuish, C., Natale, L., Skachek, S., van Der Zant, T., Warneken, F., Dominey, P.F.  
**Towards a Platform-Independent Cooperative Human-Robot Interaction System: I. Perception**  
*IROS* 2010. DOI: 10.1109/IROS.2010.5652697.
- Mallet, A., Pasteur, C., Herrb, M., Lemaignan, S., Ingrand, F.  
**GenoM3: Building middleware-independent robotic components**  
*ICRA* 2010. DOI: 10.1109/ROBOT.2010.5509539.
- Mehani, O., Benenson, R., Lemaignan, S., Ernst, T.  
**Networking Needs and Solutions for Road Vehicles at Imara**  
*ITST* 2007. DOI: 10.1109/ITST.2007.4295894.
- Stinckwich, S., Lemaignan, S., Saidani, S.  
**SqueakBot: a Pedagogical Robotic Platform**  
*C5 Conference* 2007. DOI: 10.1109/C5.2007.28.
- Lemaignan, S., Siadat, A., Dantan, J.Y., Semenenko, A.  
**MASON: A proposal for an ontology of manufacturing domain**  
*IEEE Workshop on Distributed Intelligent Systems (DIS)* 2006. DOI: 10.1109/DIS.2006.48.

## Short peer-reviewed publications

- Wallbridge, C., Lemaignan, S., Senft, E., Belpaeme, T.  
**Towards Generating Spatial Referring Expressions in a Social Robot: Dynamic vs Non-Ambiguous**  
*HRI* 2019. DOI: 10.1109/HRI.2019.8673285.
- Bartlett, M., Belpaeme, T., Thill, S., Edmunds, C. E. R., Lemaignan, S.  
**What Can You See? Identifying Cues on Internal States from the Kinematics of Natural Social Interactions**  
*IDC - Workshop 'The Near Future of Children's Robotics'* 2018.
- Senft, E., Lemaignan, S., Baxter, P., Belpaeme, T.  
**Leveraging Human Inputs in Interactive Machine Learning for Human Robot Interaction**  
*HRI* 2017. DOI: 10.1145/3029798.3038385.
- Senft, E., Lemaignan, S., Baxter, P., Belpaeme, T.  
**SPARC: an efficient way to combine reinforcement learning and supervised autonomy**  
*NIPS - Proc. of the Future of Interactive Learning Machines (FILM) Workshop* 2016.

- Lemaignan, S., Kennedy, J., Baxter, P., Belpaeme, T.  
**Towards Machine-Learnable Child-Robot Interactions: the PInSoRo Dataset**  
*RoMAN - Workshop on Long-term Child-robot Interaction* 2016.
- Kennedy, J., Lemaignan, S., Belpaeme, T.  
**The Cautious Attitude of Teachers Towards Social Robots in Schools**  
*RoMAN - Workshop on Robots for Learning* 2016.
- Senft, E., Baxter, P., Kennedy, J., Lemaignan, S., Belpaeme, T.  
**Providing a Robot with Learning Abilities Improves its Perception by Users**  
*HRI* 2016. DOI: 10.1109/HRI.2016.7451832.
- Baxter, P., Lemaignan, S., Trafton, G.  
**Workshop on Cognitive Architectures for Social Human-Robot Interaction**  
*HRI* 2016. DOI: 10.1109/HRI.2016.7451865.
- Lemaignan, S., Alami, R.  
**A Few AI Challenges Raised while Developing an Architecture for Human-Robot Cooperative Task Achievement**  
*AAAI 2014 Fall Symposium Series - Artificial Intelligence and Human-Robot Interaction* 2014.
- Lemaignan, S., Fink, J., Dillenbourg, P.  
**The Dynamics of Anthropomorphism in Robotics**  
*HRI* 2014. DOI: 10.1145/2559636.2559814.
- Lemaignan, S., Echeverria, G., Karg, M., Mainprice, M., Kirsch, A., Alami, R.  
**Human-Robot Interaction in the MORSE Simulator**  
*HRI* 2012. DOI: 10.1145/2157689.2157745.
- Lemaignan, S., Ros, R., Alami, R.  
**Dialogue in situated environments: A symbolic approach to perspective-aware grounding, clarification and reasoning for robots**  
*Workshop Grounding Human-Robot Dialog for Spatial Tasks - RSS* 2011.
- Lemaignan, S., Sisbot, E. A., Alami, R.  
**Anchoring interaction through symbolic knowledge**  
*HRI Pioneers - HRI* 2011. ISBN: 978-0-557-79488-1.
- Ros, R., Sisbot, E. A., Lemaignan, S., Pandey, A. K., Alami, R.  
**Robot, tell me what you know about...?: Expressing robot's knowledge through interaction**  
*ICAIR* 2010.

## Book chapters

- Mondada, F., Fink, J., Lemaignan, S., Mansolino, D., Wille, F., Franinović, K.  
**Ranger, an Example of Integration of Robotics into the Home Ecosystem**  
2015.

## Dissertation

- Lemaignan, S.  
**Grounding the Interaction: Knowledge Management for Interactive Robots**  
*CNRS - LAAS / TU München - Intelligent Autonomous Systems lab* 2012.