Séverin Lemaignan

Senior Scientist
Social Robotics and AI

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39 years old

Scientific Focus: **Robot cognition and decision making for safe social interactions**: data-driven understanding of social interactions; explainable AI; ethics of safe human-robot interactions; robust human-robot multi-modal interaction; symbolic and sub-symbolic knowledge representation.

Keywords: **Social Robotics**, **Robotic Cognition**, **Responsible Human-Robot Interaction**, **Cognitive Architectures**

Education & Research Activities

2021– **Senior Scientist in Social Robotics and AI**, *PAL Robotics, Spain*.
Research team leader, overseeing the development of Social Robots and autonomous Human-Robot Interactions capabilities.

2019–2021 **Associate Professor in Social Robotics and AI**, *Bristol Robotics Lab, United Kingdom*.
Supervision of the Human-Robot Interaction research group; Supervision of the Driverless Vehicle research group.
Directly managing 20+ students and early career researchers.

2018–2019 **Senior Research Fellow in Robotics and Artificial Intelligence**, *Bristol Robotics Lab, United Kingdom*.

2017–2018 **Lecturer in Robotics**, *Plymouth University, Plymouth, United Kingdom*.

2015–2017 **EU Marie Skłodowska-Curie Post-doctoral fellow**, *Centre for Neural Systems and Robotics, Plymouth University, Plymouth, United Kingdom*.
Development and Implementation of a Theory of Mind for robots.

2013–2015 **Post-doctoral fellow**, *CHILI, EPFL, Lausanne, Switzerland*.
Interaction with Robots in Learning Environments – Supervision of the robotic group.

2012–2013 **Post-doctoral fellow**, *LAAS-CNRS, Toulouse, France*.
Spatial and Temporal Reasoning for Cognitive Robotic Architectures.

2008–2012 **Joint German-French PhD in Cognitive Robotics**, *LAAS-CNRS, Toulouse, France / Technical University of Munich, Germany*.
with High Distinction "Summa Cum Laude" – awarded CNRS' **Best PhD in Robotics 2012**
Supervisors: Pr. Rachid Alami, CNRS; Pr. Michael Beetz, TUM.

2006–2007 **Research Engineer**, *INRIA, Paris, France*.
Development of semantic-aware control architectures for autonomous vehicles.

2002–2006 **Joint German-French MSc of Engineering**, *Karlsruhe Institute of Technology / ENSAM ParisTech*.

2004–2005 **MSc Artificial Intelligence for Learning Technologies**, *University Paris V, College of Mathematics and Computer Sciences*, With Honours.

Scientific Impact & Dissemination Activities

Active figure of the Intelligent Robots community, *invited to high-profile editorial roles*.

As of Feb 2021, 75+ publications, *2800+ citations, h-index = 25, i10-index = 45* .

Recent International expert & advisory roles

2021– **Expert on Ethics of Child-Robot Interaction; EU JRC/UNICEF**.

2017– **EU H2020 member on the Peer Review College**.

2019– **Full member of the UK EPSRC College**.

2019– **Invited PhD committee examiner**, *6 times since 2019, in Sweden (Örebro, Uppsala, KTH), Germany (Bielefeld), France (LAAS-CNRS), UK (Bristol Robotics Lab)*.

2019 **Invited Expert in Child-Robot Interaction**, *robot4SEN project, VTC, Hong Kong*.

2018– **Senior Scientific Adviser for South-West UK SMEs**, *EU H2020 SABRE project*.

Significant National & International Editorial roles

2018– **Associate Editor**, *Frontiers in Robotics and AI*.

2018– **Program Committee of major international conferences in AI and robotics**, *IROS'16–'18; IJCAI'17'18'20'21; HRI'16–'20; HAI'18; AAMAS'19; RSS'20*.

2017–2021 **Organisation of the IEEE/ACM HRI conference**, *alt.HRI chair '17, local chair '20, Student Design Competition chair '21*.

2019 **UK TAROS conference on Autonomous Robotic Systems**, *co-coordinator*.

Policy making

2020 – **Expert Collaborator for the European Joint Research Centre**, *contributing to the UNICEF Guidelines for Responsible Child-Robots Interactions*.

2019 **Invited panel by the EU Research Executive Agency**, *MSCA AI Cluster, sharing expertise in Human-Robot Interaction*.

2018–2020 **BRL strategic planning**, *involved in discussion about Intelligent Manufacturing; HRI systems; Assistive robotics with key UK policy makers, incl. BEIS Secretary of State Greg Clark; Minister of State for Universities, Science, Research and Innovation Chris Skidmore; West of England CA Tim Bowles*.

Recent International Keynotes and Invited Talks

- **Robots for Learning** – *invited speaker*, 2019
  Robot4SEN, Vocational Training Council, Kong Kong
- **From Big Data to Social Robotics** – *keynote*, 2019
  UK RAS conference, Loughborough, UK
- **Big Data and Social Robotics** – *invited speaker*, 2018
  LAAS-CNRS, Toulouse, France
- **Child-robot Social Interactions** – *invited speaker*, 2018
  IIT, Genoa, Italy
- **Theory of Mind and Joint-action** – *keynote*, 2018
  Robotics Science and System, Pittsburgh, USA
- **Immersive Technologies for Safe Driverless Vehicles** – *invited speaker*, 2018
  South West Creative Technology Network, Bristol, UK
- **Human-Robot interaction in the context of safe driverless vehicles** – *invited speaker*, 2018
  HRI Symposium, Stanford University, Stanford, USA
- **Robots for Learning** – *keynote*, 2018
  Symposium on Robots for Language Learning, Koç University, Istanbul, Turkey

Awards and Honours

HRI'2017 **Best Paper Award 'Design'**.

HRI'2016 **Best Paper Award 'Methods and Theory'**.

AAAI'2015 **Best Video Award in Artificial Intelligence**.

AAAI'2014 **Best Late Breaking Report Award**.

2012 **Best PhD in Robotics**, *CNRS*.

2012 **PhD with High Distinction**, *("Summa Cum Laude"), TU Munich*.

Ro-Man'2010 **Best Paper Award**.

Publications

As of Jan 2022, 90+ publications, 3400+ citations, h-index = 29, i10-index = 53 *(Google Scholar)*.
→ *Link to complete list of publications, workshops and seminars*.

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)

- Chance, G., Ghobrial, A., Lemaignan, S., Pipe, T., Eder, K.,
  An Agency-Directed Approach to Test Generation for Simulation-based Autonomous Vehicle Verification,
  AI Test 2020. DOI: 10.1109/AITEST49225.2020.00012.
- Wijnen, L., Bremner, P., Lemaignan, S., Giuliani, M.,
  Performing Human-Robot Interaction User Studies in Virtual Reality,
  RoMAN 2020. DOI: 10.1109/RO-MAN47096.2020.9223521.
- Winkle, K., Lemaignan, S., Caleb-Solly, P., Leonards, U., Turton, A., Bremner, P.,
  In-Situ Learning from a Domain Expert for Real World Socially Assistive Robot Deployment,
  RSS 2020. DOI: 10.15607/RSS.2020.XVI.059.
- Sallami, Y., Lemaignan, S., Clodic, A., Alami, R.,
  Simulation-based physics reasoning for consistent scene estimation in an HRI context,
  IROS 2019. DOI: 10.1109/IROS40897.2019.8968106.
- 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., Franinovi , 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

- Mohamed, Y., Lemaignan, S.,
  Predicting Human Interactivity State from Surrounding Social Signals,
  HRI 2021. DOI: 10.1145/3434074.3447230.
- Webb, N., Mohamed, Y., Lemaignan, S.,
  Framing the Challenge of Social Interaction Modelling: One Case Study,
  HRI 2021. DOI: 10.1145/3434074.3447233.

- Park, C.H., Ros, R., Kwak, S., Huang, C., Lemaignan, S.,
  Towards Real World Impacts: Design, Development, and Deployment of Social Robots in the Wild,
  Frontiers in AI and Robotics 2020. DOI: 10.3389/frobt.2020.600830.
- Sallami, Y., Winkle, K., Webb, N., Lemaignan, S., Alami, R.,
  The Unexpected Daily Situations (UDS) Dataset: A New Benchmark for Socially-Aware Assistive Robots,
  HRI 2020. DOI: 10.1145/3371382.3378270.
- Wijnen, L., Lemaignan, S., Bremner, P.,
  Towards using Virtual Reality for Replicating HRI Studies,
  HRI 2020. DOI: 10.1145/3371382.3378374.
- Winkle, K., Lemaignan, S., Caleb-Solly, P., Leonards, U., Turton, A., Bremner, P.,
  Couch to 5km Robot Coach: An Autonomous, Human-Trained Socially Assistive Robot,
  HRI 2020. DOI: 10.1145/3371382.3378337.
- 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., Franinovi , K.
  Ranger, an Example of Integration of Robotics into the Home Ecosystem
  2015.

Selected Fellowships & Grants

2020–2021 **University of the West of England**, *Robots4SEN: Social Robots to Support Children with Autism*, Principal Investigator, £25K.

2019–2022 **InnovateUK**, *CAV Forth – Verification for Connected Autonomous Vehicles*, Co-Investigator, £600K.

2015–2017 **EU H2020 Marie Skłodowska-Curie Individual Fellowship**, Principal Investigator, € 195K.

Supervision & Teaching Experience

Students supervision, Supervised 9 PhD and 20+ MSc students to date, (click here for full list).

- N. Webb (PhD, 2019-): *Data-Driven Human Robot Interaction*
- M. Bartlett (PhD, 2017-): *Data-Driven Social Robotics*
- K. Winkle (PhD, 2016-2020): *Persuasive human-robot interactions*
- C. Wallbridge (PhD, 2016-2019): *Spatial reasoning for Child-Robot Interaction*
- E. Senft (PhD, 2015-2018): *Shared autonomy for social human-robot interactions*
- A. Jacq (PhD, 2014-2017): *Mutual modeling and repair strategies in HRI*
- A. Özgür (PhD, 2014-2017): *Cellulo: haptic robotics for learning*
- S. Chandra (PhD, 2013-2017): *CoWriter project: learning by teaching handwriting to a robot*
- J. Fink (PhD, 2011-2014): *Long-term acceptance of robots in daily life & anthropomorphism*

2018– **University of the West of England**, *associate professor*.
teaching at MSc level; Human-Robot Interaction, data science, software engineering for robotics, ROS

2016–2018 **Plymouth University**, *lecturer*.
teaching at BSc & MSc level robotics, including HRI, ROS, Kalman filtering, localisation and planning, control architectures

2018–2016 **Guest lectures & Seminars**, *Plymouth University, EPFL, Université de Toulouse*.
ROS, simulation, ontologies, Python/C++ software engineering, computer graphics & 3D modelling.

2008–2011 **Teaching assistant**, *INSA Toulouse, Écoles des Mines de Paris*.
Prolog, Ontology Modeling, Java, ADA, SQL, Mechatronics.

Selected outreach activities

2019– **Cluster Lead for STEM outreach**, *University of the West of England*.

2019– **Scientific advisor for the WeTheCurious Bristol's science museum**, *Open City Lab project*.

2016– **UK & EU Robotics Weeks coordinator**, *University of Plymouth, University of the West of England*.

2011 **'Roboscopie' Human-Robot public theater performance**, *Science Day'11*.
`http://bit.ly/1LQpNWA`

2008–2011 **Toulouse's Cognitive Sciences Students Association**, *Co-chair*.

2008–2009 **South African SciFest festival**, *Science facilitator*.

1997–2012 **Executive Committee & Head of Educational Robotics, Planète Sciences**, *including coordination of the EU-ROBOT Robotic Competition* .

Technical Skills and Spoken Languages

Robotics
- Expert in cognitive robotics and human-robot interaction
- ROS, Symbolic knowledge manipulation expert
- Expert PR2, Pepper, Nao developer
- Contributor to ROS, OpenCV
- Lead dev. MORSE simulator

Programming
- Python, modern C++, Prolog, SmallTalk
- Deep-learning frameworks: pytorch, TensorFlow
- Open-source enthusiast
  GitHub: `github.com/severin-lemaignan`

Languages

French Native
English Fluent
German Advanced