







Yasser Mohammad

Principal Researcher
Data Science Labs, NEC

-  **Date of Birth:** Sep. 7, 1976
-  Tokyo, Japan
-  +81-80-5652-4120
-  y.mohammad@nec.com
-  <http://www.yasserm.com>
-  ORCID:0000-0003-2272-7254

Interests

-  Automated Negotiation
-  Human-Robot Interaction
-  Time Series Data Mining
-  Activity Recognition

Short Bio

Yasser received his PhD from Kyoto University in 2009. Since then he worked in universities, national research institutes, research companies and industrial research laboratories. He collaborated with experts in psychology, computer science, mathematics, robotics, HCI, HRI, machine learning among other fields. His research spans the area of applied AI with a focus on robotics and multiagent systems. Author of two books a hundred articles. A senior IEEE member, PC member and reviewer for AAAI, IJCAI, AAMAS, IROS, HRI, IEEE Trans. on System Man and Cybernetics, Social Robotics, Applied Intelligence, among many others. Main organizer of the SCML@ANAC running yearly in conjunction of IJCAI.

Industrial Working Experience

- Jan, 2020 – ongoing **Principal Researcher** Data Science Research Laboratories NEC
Conducting research and developing systems in the areas of multi-agent systems and ML.
- August, 2020 – ongoing **Visiting Researcher** AIP, RIKEN, Japan
Research in automatic negotiation specially preference elicitation.
- Feb, 2020 – ongoing **Specially Appointed Researcher** AIRC, AIST, Japan
Research in automatic negotiation specially preference elicitation during negotiation.
- Nov, 2017 – Dec, 2019 **Researcher** AIRC, AIST, Japan
Research in automatic negotiation.
- Jun, 2017 – Nov, 2017 **Data Science Advisor** Xtrava, USA (xtrava.co)
Developing innovative real-time machine learning systems for biosensor data analysis.
- Nov, 2016 – Nov, 2017 **Chief Research Engineer** KDDI Research Inc. Japan (kddi-research.jp)
Conducting state of the art research in human behavior understanding using machine learning techniques. Mainly using python and C++. Applying pattern recognition and deep learning techniques to time-series data mining.
- Jan, 2007 – Oct, Mar 2009 **Technical Executive Officer** Ayonix Inc. Japan (ayonix.com)
Developed the complete first version of Ayofa SDK (A face detection/recognition SDK). Developed a system for automatic segmentation and recognition of road signs from videos. Managed the development team of all products in the company.
- Apr, 2004 – Oct, 2005 **Developer** SCTU, Assiut Univ., Egypt
Developed Assiut University Information Systems Internet Portal and designed software for university automation.

Academic Working Experience

- Aug, 2016 – ongoing **Associate Professor (currently onleave)** Assiut Univ., Egypt
Teaching and conducting research in applied intelligence at the department of Electrical Engineering, Faculty of Engineering, Assiut University, Egypt (one of the first academically accredited Engineering program in Egypt)
- Oct, 2015 – Jun, 2016 **Adjunct Professor** E-JUST Univ., Egypt
Working as an Adjunct Assistant Professor for one day/week at Mechatronics and Robotics Engineering Department, Egypt-Japan University of Science and Technology (E-JUST), Egypt.
- Sep, 2012 – Aug, 2014 **JSPS Fellow** Kyoto Univ., Japan
Conducting research in imitation learning and its applications in robotics.
- Jul, 2011 – Dec, 2011 **GCOE Postdoc Visiting Researcher** Kyoto Univ., Japan
Conducting research in the applied intelligence dept. in collaboration with Prof. T. Nishida.
- Jan, 2010 – Aug, 2016 **Assistant Professor** Assiut Univ., Egypt
Teaching and conducting research in applied intelligence at the department of Electrical Engineering, Faculty of Engineering, Assiut University, Egypt (the first academically accredited Engineering program in Egypt)
- Jun, 2005 – Dec, 2009 **Teaching Associate** Assiut Univ., Egypt
Assisting in teaching courses to students of Electrical Engineering, Mechanical Engineering and introductory Engineering courses and supervising graduation-projects
- Apr, 2000 – Jun, 2005 **Teaching Assistant** Assiut Univ., Egypt
Assisting in teaching courses to students of Electrical Engineering, Mechanical Engineering and introductory Engineering courses and supervising graduation-projects
- Sep, 1999 – Apr, 2000 **Teaching Assistant** Assiut Univ., Egypt
Assisting in teaching courses to students of Electrical Engineering, Mechanical Engineering and introductory Engineering courses and supervising graduation-projects

Metrics



Profiles



Languages

Arabic (Mother Tongue)

English (Fluent)

Japanese (Learning)

Personal

Yasser lives with his partner, a medical doctor, and three children in Tokyo since 2016.

Honours and Awards

- Nov 2020 **Runner for Best Paper Award** Nagoya, Japan
The 23rd International Conference on Principles and Practice of Multi-Agent Systems (PRIMA)
- Mar 2015 **Best Presentation Award** Kitakyush, Japan
the 3rd International Conference on Industrial Application Engineering
- Sep 2014 **Outstanding Paper Award** Seoul, South Korea
ICROS International Conference on Control, Automation and Systems (ICCAS) 2014 (out of 337 accepted papers from 25 countries)
- Sep 2012 **JSPS Fellowship** Kyoto University, Japan
JSPS long term post-doc fellowship for foreign researchers (2012-2014)
- Jul 2011 **GCOE Postdoc Fellowship** Kyoto University, Japan
July-December 2011
- Oct 2011 **Best Paper Award** Kitakyush, Japan
IEEE SII 2012 (Control) (from 248 accepted papers)
- Jun 2009 **Best Paper Award** Tainan, Taiwan
the Twenty Second International Conference Industrial, Engineering, and other applications of Applied Intelligent Systems (IEA/AIE 2009). Acceptance rate was 29% out of 286 submitted papers (ranked 46th among top 701 computer science conferences)
- Jun 2008 **Best Paper Award** Wroclaw, Poland
the Twenty First International Conference Industrial, Engineering, and other applications of Applied Intelligent Systems (IEA/AIE 2008). Acceptance rate was 30% out of 270 submitted papers (ranked 46th among top 701 computer science conferences)

Funded Projects

- May 2014 **Theoretical Framework for Interactive Game Design** >10M JPY
Investigator **Aerospace Research and Development (AFOSR/AOARD)** To establish a theoretical framework for achieving content-rich, proficient and reliable communication between people and robots.
- Sep 2012 **Fluid Imitation Learning** 2.5M JPY
PI **Japanese Society for Promotion of Science** To design, implement and evaluate an imitation engine for humanoid robots that achieves fluid imitation by autonomously discovering interesting motions to imitate during its interaction with humans.
- Nov 2008 **Grounded Action Segmentation and Association** 1M JPY
PI **Global Centre of Excellence Young Researcher Program, Kyoto University** To build and evaluate an unsupervised algorithm for learning interactive behavior both in implicit and explicit nonverbal communication settings.
- Dec 2007 **Natural Listening for a Humanoid Robot** 1.5M JPY
PI **Global Centre of Excellence Young Researcher Program, Kyoto University** To design and implement a learning system that can help the robot achieve natural listening behavior in an automatic way.

Patents

- 2019-087106JP **A method for activity recognition** JPO
A method for training multiple pipelines of convolutional neural networks to achieve high accuracy in activity recognition
- 2019-061338JP **A method for deep neural network compression** JPO
A method for compression neural networks (convolutional or otherwise) based on novel application of feature selection techniques

Education

- 2006 – 2009 **Ph.D. in Informatics (Robotics)** Kyoto Univ. Japan
Title: Autonomous Development of Natural Interactive Behavior for Robots and Embodied Agents.
HRI Unsupervised Learning Time Series Analysis
- 2001 – 2005 **M.Sc. in Computers and Systems Engineering** Assiut Univ. Egypt
Title: Anubis: A novel network authentication protocol.
Computer Security Network Authentication BAN Logic
- 1993 – 1998 **B.Sc. in Electrical Engineering** Assiut Univ., Egypt
Project Title: Construction and control of a 2D robot for drawing applications.
Grade: Very Good (Ranked 2rd. among 200 students)

Teaching Experience

Academic Supervision

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|-----------|--|-------|
| 2012–2016 | Imitation Learning in Robotics | M.Sc. |
| 2015–2019 | Pattern Discovery in Time Series | M.Sc. |
| 2015–2020 | Feature Selection for Face Recognition | M.Sc. |

Postgraduate Courses (Partial List)

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|-------------------|---|-----------|
| E-JUST University | Mechatronics Engineering
Intelligent Control Systems | 2016 |
| Assiut University | Electrical Engineering M.sc. and PhD
Robot Motion Planning, Pattern Recognition, Probabilistic Inference, Data Sciences and BigData | 2010–2015 |

Undergraduate Courses (Partial List)

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|-------------------|---|-----------|
| Assiut University | Electrical Engineering
Introduction to Computer Science, Numerical Analysis, Microprocessors, Computer Organization, Computer Architecture, Database Systems, Digital Signal Processing | 2010–2015 |
| Assiut University | Mechatronics
Robotics Engineering | 2010–2015 |
| Assiut University | Information and Computers
Graphical User Interfaces, Network Security, Computer Security, Microprocessors, Computer Organization | 2010–2015 |

Organization and Editorial Duties

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| Journals | New Generation Computing, Social Robotics, IEEE Trans. on Systems Man and Cybernetics, IEEE Trans. on Industrial Electronics, Neurocomputing, AI & Society, Intelligent Learning Systems and Applications, Robotics and Automation, IETE Technical Review, Computer Methods and Programs in Biomedicine, Applied Intelligence, Advances in Intelligence Systems, ... |
| Conferences | AAAI, IJCAI, AAMAS, IEEE ROMAN, IEEE HRI, IEEE IROS, DATA, IEA/AIE, ISIEA, PECON, ACHI, ICCCI, ICAS, KUI, ... |
| Organizer | SCM league of the ANAC competition in conjunction with IJCAI since 2019 |

Publications and Talks

Tutorials

- **[2019]** Automated Negotiation: Challenges and Tools, Yasser Mohammad, The 22nd International Conference on Principles and Practice of Multi-Agent Systems, Torino, Italy

Invited Talks

- **[2018]** Fluid Imitation, Yasser Mohammad, Human-Robot Interaction: From Service to Industry (HRI-SI2018) part of IEEE ROMAN 2018, Nanjing, China.
- **[2012]** SSA application to motif discovery and causality analysis in robotics, Yasser Mohammad, Third International Conference on SSA and its applications, Beijing, China, May 17th-May 20th.

Books

- **[2016]** Yasser Mohammad and Toyoaki Nishida, Data Mining for Social Robotics, in preparation to appear from Springer in early 2016, ISBN 978-3-319-25230-8.
- **[2014]** T. Nishida, A. Nakazawa, Y. Ohmoto, Y. Mohammad, Conversational Informatics: A data intensive approach with emphasis on Nonverbal Communication, Springer, ISBN 978-4431550396.

International Journals

- **[2020]** Supply Chain Management League(SCML) — Automated Negotiating Agent Competition for Manufacturing Value Chain, Yasser Mohammad, Shinji Nakadai, Satoshi Morinaga, Katsuhide Fujita, JSAI Journal Vol 35 No 3, May 2020
- **[2018]** Primitive activity recognition from short sequences of sensory data, Y Mohammad, K Matsumoto, K Hoashi - Applied Intelligence,
- **[2019]** Selecting orientation-insensitive features for activity recognition from accelerometers(), Mohammad, Y., Matsumoto, K., Hoashi, K. IEICE Transaction on Information and Systems, 102(1), 104-115.
- **[2016]** Exact multi-length scale and mean invariant motif discovery, Yasser Mohammad and Toyoaki Nishida, Applied Intelligence, vol.44, no.2, pp. 322-339, March
- **[2015]** Learning interaction protocols by mimicking: Understanding and reproducing human interactive behavior, Yasser Mohammad and Toyoaki Nishida, Pattern Recognition Letters, vo. 66, no. 15, pp. 62-70, November
- **[2015]** Why should we imitate robots? Effect of back imitation on judgment of imitation skill, Yasser Mohammad and Toyoaki Nishida, International Journal on Social Robotics, vol.7, no.4, pp. 497-512, August
- **[2015]** Shift Density Estimation based Approximately Recurring Motif Discovery, Yasser Mohammad and Toyoaki Nishida, International Journal of Applied Intelligence, vol. 42, no. 1, pp. 112-134, January
- **[2013]** Learning where to look: Autonomous Development of Gaze Behavior for Natural Human-Robot Interaction, Yasser Mohammad and Toyoaki Nishida, International Journal of Interaction Studies, Springer, no. 32, pp. 419-450, .
- **[2012]** Fluid Imitation: Learning from Unplanned Demonstrations, Yasser Mohammad and Toyoaki Nishida, International Journal of Social Robotics, vol. 4, pp 369-382,
- **[2010]** Using Physiological Signals to Detect Natural Interactive Behavior, Yasser Mohammad and Toyoaki Nishida, Applied Intelligence, vol. 13, no. 1, pp. 79-92,
- **[2010]** A Cross-Platform Robotic Architecture for Autonomous Interactive Robots, Yasser Mohammad and Toyoaki Nishida, International Journal of Applied Intelligence, Vol. 32, No. 2, pp 148-163,
- **[2009]** Constrained Motif Discovery in Time Series, Yasser Mohammad and Toyoaki Nishida, New Generation Computing Journal, vol. 27, pp. 319-346,
- **[2009]** Interaction Between Untrained Users and a Miniature Robot in a Collaborative Navigation Controlled Experiment, Yasser Mohammad and Toyoaki Nishida, International Journal of Information Acquisition, World Scientific Publishing Company. Vol. 5, No. 4, pp 291-308, April
- **[2009]** Towards Combining Autonomy with Interaction for Social Robots, Yasser Mohammad and Toyoaki Nishida, AI & Society, vol. 24, no. 1, pp 35-53,
- **[2009]** Interactive Perception for amplification of intended behavior in complex noisy environment, Yasser Mohammad and Toyoaki Nishida, AI & Society Journal, vol. 23, no. 2, pp 167-186, March
- **[2006]** Towards Robots as an Embodied Knowledge Medium, Toyoaki Nishida, Kazunori Terada, Takashi Tajima, Makoto Hatakeyama, Yoshiyasu Ogasawara, Xu Yong, Yasser Mohammad, Kateryna Tarasenko, Taku Ohya, and Tatsuya Hiramatsu, IEICE Trans. On Inf. & Sys., vol. E89-D, No 6, pp. 1768-1780, June

International Conferences

- **[2020]** Optimal Deterministic Time-dependent Policy in Automated Negotiation, Yasser Mohammad, The 23rd International Conference on Principles and Practice of Multi-Agent Systems (PRIMA), Nagoya, Japan, November [Best Paper Runner].
- **[2020]** NegMAS: A platform for Automated Negotiations, Yasser Mohammad, Shinji Nakadai, and Amy Greenwald, The 23rd International Conference on Principles and Practice of Multi-Agent Systems (PRIMA), Nagoya, Japan, November.
- **[2020]** Integrating Language and Emotion Features for Multilingual Speech Emotion Recognition, Panikos Heracleous, Yasser Mohammad, Akio Yoneyama, 22nd International Conference On Human-Computer Interaction, Copenhagen, Denmark, July.
- **[2020]** An Empirical Study On Feature Extraction In Dnn-Based Speech Emotion Recognition, Panikos Heracleous, Kohichi Takai, Yanan Wang, Keiju Yasuda, Akio Yoneyama, Yasser Mohammad, 22nd International Conference On Human-Computer Interaction, Copenhagen, Denmark, July.

- [2019] Empirical Mechanism Design under Uncertainty, Enrique Areyan Viqueira, Amy Greenwald, Yasser Mohammad, Uncertainty in AI,
- [2019] Research Challenges for the Automated Negotiating Agents Competition (ANAC) , Reyhan Aydođan, Tim Baarslag, Katsuhide Fujita, Johnathan Mell, Jonathan Gratch, Dave De Jonge, Yasser Mohammad, Shinji Nakadai, Satoshi Morinaga, Hirotaka Osawa, Claus Aranha and Catholijn Jonker, EUMAS AT 2020
- [2019], NegMAS: A platform for situated negotiations, Yasser Mohammad, Shinji Nakadai, Amy Greenwald, Twelfth International Workshop on Agent-based Complex Automated Negotiations (ACAN) in conjunction with IJCAI 2019, Macau, August 2019
- [2019] Optimal Value of Information Based Elicitation During Negotiation, Yasser Mohammad and Shinji Nakadai, AAMAS , Montreal, Canada pp. 242-250
- [2019] Multidimensional Permutation Entropy for Constrained Motif Discovery, Yomna Rayan, Yasser F. O. Mohammad, Samia A. Ali, ACIIDS 231-243
- [2019] Speech emotion recognition using spontaneous children’s corpus (, April), Heracleous P., Mohammad Y., Yasuda K., Yoneyama A. , CICLing 2019, La Rochelle, France.
- [2018] Comparative Study on Spoken Language Identification Based on Deep Learning (, September), Heracleous, P., Takai, K., Yasuda, K., Mohammad, Y., and Yoneyama, A., In 2018 26th European Signal Processing Conference (EUSIPCO) (pp. 2265-2269). IEEE.
- [2018] Deep feature learning and selection for activity recognition, (, April), Y. Mohammad, K. Matsumoto, K. Hoashi, In Proceedings of the 33rd Annual ACM Symposium on Applied Computing (pp. 930-939). ACM.
- [2018] FastVOI: Ecient Utility Elicitation During Negotiations, Yasser Mohammad and Shinji Nakadai, PRIMA , October 2018, Tokyo, Japan
- [2018] Utility Elicitation During Negotiation with Practical Elicitation Strategies, Yasser Mohammad and Shinji Nakadai, IEEE International Conference on Systems, Man, and Cybernetics (IEEE SCM), Miyazaki, Japan, October 7-10.
- [2018] Deep feature learning and selection for activity recognition, Yasser Mohammad, Kazunori Matsumoto, and Keiichiro Hoashi, In Proceedings of the 33rd Annual ACM Symposium on Applied Computing (SAC '18), pp. 930-939, New York, NY, USA, .
- [2017] A dataset for activity recognition in an unmodified kitchen using smart-watch accelerometers, Yasser Mohammad, Kazunori Matsumoto, and Keiichiro Hoashi, In Proceedings of the 16th International Conference on Mobile and Ubiquitous Multimedia (MUM '17). ACM, New York, NY, USA, 63-68, .
- [2018] Comparative Study on Spoken Language Identification Based on Deep Learning, Panikos Heracleous, Kohichi Takai and Keiji Yasuda, Yasser Mohammad, Akio Yoneyama, 26th European Signal Processing Conference (EUSIPCO) , Rome, Italy, September 3-7, 2018
- [2018] I-vectors and Deep Convolutional Neural Networks for Language Identification in Clean and Reverberant Environments, Panikos Heracleous, Yasser Mohammad, Akio Yoneyama, International Conference on Computational Linguistics and Intelligent Text Processing (CICLing), March 18 to 24, • Hanoi, Vietnam
- [2018] Spoken Language Identification Based on I-vectors and Conditional Random Fields, Panikos Heracleous, Yasser Mohammad, Akio Yoneyama, 14th International Wireless Communications and Mobile Computing Conference IWCMC , Limassol, Cyprus, June 25-29, 2018
- [2017] COLD: A ROS Package for Continuous Learning from Demonstration: teaching a robot to write, Mostafa Hussein, Yasser Mohammad, Samia Ali, Toyooki Nishida, IEEE International Conference on Mechatronics and Automation ICMA , pp. 651-657, Takamatsu, Japan,
- [2016] MC2: An integrated toolbox for change, causality, and motif discovery, Yasser Mohammad and Toyooki Nishida, IEA/AIE, August , pp. 128-141, Morioka, Japan
- [2015] Cultural difference in back-imitation’s effect on the perception of robot’s imitative performance, Yasser Mohammad and Toyooki Nishida, IEEE RO-MAN’s workshop on Cultural Robotics, Kobe, Japan, August
- [2015] Learning From Demonstration Using Variational Bayesian Inference, Mostafa Hussein, Yasser Mohammad, and Samia A. Ali, First International Conference on Industrial, Engineering & Other Applications of Applied Intelligent Systems IEA/AIE, pp. 371-381, Seool, Korea,
- [2015] Synthetic Evidential Study as Augmented Collective Thought Process – Preliminary Report, Toyooki Nishida, Masakazu Abe, Takashi Ookaki, Divesh Lala, Sutasinee Thovuttikol, Hengjie Song, Yasser Mohammad, Christian Nitschke, Yoshimasa Ohmoto, Atsushi Nakazawa, Takaaki Shochi, Jean-Luc Rouas, Aurelie Bugeau, Fabien Lotte, Zuheng Ming, Geoffrey Letournel, Marine Guerry and Dominique Fourer, 7th Asian Conference on Intelligent Information and Database systems (ACIIDS), pp. 13-22, Indonesia,
- [2015] Synthetic Evidential Study as Primordial Soup of Conversation, Toyooki Nishida¹, Atsushi Nakazawa, Yoshimasa Ohmoto, Christian Nitschke, Yasser Mohammad, Sutasinee Thovuttikol, Divesh Lala, Masakazu Abe, Takashi Ookaki, 10th International Workshop on Databases in Networked Information Systems (DNIS), pp. 74-83, Japan
- [2015] Simple Incremental GMM Modeling using Multidimensional Piecewise Linear Segmentation for Learning from Demonstration, Yasser Mohammad and Toyooki Nishida, 3rd International Conference on Industrial Application Engineering (ICIAE), Japan, **(Best Presentation Award)**
- [2014] Robust Learning from Demonstrations using Multidimensional SAX, Yasser Mohammad and Toyooki Nishida, International Conference on Control, Automation, and Systems , pp. 64-71, Korea (September 22-26, 2014), **(Outstanding Paper Award)**
- [2014] Human-like motion of a humanoid in a shadowing task, Yasser Mohammad and Toyooki Nishida, 5th International Workshop on Collaborative Robots and Human Robot Interaction (CR-HRI) , part of the 2014 International Conference on Collaboration Technologies and Systems (CTS 2014), pp. 123-130, Minneapolis, Minnesota, USA, 2014
- [2014] Scale Invariant Multi-length Motif Discovery, Yasser Mohammad and Toyooki Nishida, The 27th International Conference on Industrial, Engineering and Other Applications of Applied Intelligent Systems, pp. 417-426, Kaohsiung, Taiwan,
- [2014] Exact Motif Discovery of Length-Range Motifs, Yasser Mohammad, Toyooki Nishida, and Atsushi Nakazawa, The 6th Asian Conference on Intelligent Information and Database Systems (ACIIDS), pp. 23-32 , Bangkok, Thailand
- [2014] Why should we imitate robots?, Yasser Mohammad and Toyooki Nishida, 13th International Conference on Autonomous Agents and Multiagents Systems (AAMAS), pp. 1499-1500, [extended abstract]
- [2014] A joint activity theory analysis of body interactions in multiplayer virtual basketball, Divesh Lala, Yasser Mohammad, Toyooki Nishida, Proceedings of the 28th International BCS Human Computer Interaction Conference on HCI, pp. 62-71, .

- **[2014]** Detection of Hidden Laughter for Human-agent Interaction, Shiho Tatsumi, Yasser Mohammad, Yoshimasa Ohmoto, Toyooki Nishida, Knowledge-Based and Intelligent Information & Engineering Systems 18th Annual Conference, pp. 1053-1062 Gdynia, Poland, September 15-17,
- **[2013]** Arm Pose Copying for Humanoid Robots, Yasser Mohammad, Toyooki Nishida, and Atsushi Nakazawa, IEEE International Conference on Robotics and Biomimetics, ROBIO , Shenzhen, China, 2013
- **[2013]** Unsupervised gesture recognition system for learning manipulative actions in virtual basketball, Divesh Lala, Toyooki Nishida, and Yasser Mohammad, International Conference on Human-Agent Interaction iHAI, pp. II-1-3,
- **[2013]** What is human-like motion in a shadowing task?, Yasser Mohammad, Toyooki Nishida, IEEE/RSJ International Conference on Intelligent Robots and Systems IROS Workshop: Towards social humanoid robots: how to make interaction human-like?, Tokyo, Japan, 2013
- **[2013]** Tackling the Correspondence Problem: Exact solution for a Humanoid Upper Body?, Yasser Mohammad, Toyooki Nishida, International Conference on Active Media Technology , pp. 84-95, Maebashi, Japan, 2013
- **[2013]** Approximately Recurring Motif Discovery Using Shift Density Estimation, Yasser Mohammad, Toyooki Nishida, International Conference on Industrial, Engineering, Other Applications of Applied Intelligent Systems IEA/AIE , pp. 141-150, 2013
- **[2013]** Learning Sensorimotor Concepts Without Reinforcement, Yasser Mohammad, Toyooki Nishida, AAAI Summer Symposium on Life Long Machine Learning , Stanford, USA
- **[2012]** Unsupervised Discovery of Basic Human Actions from Activity Recording Datasets, Yasser Mohammad, Toyooki Nishida, IEEE/SICE International Symposium on System Integration, pp. 402-409, Kyushu, Japan,
- **[2012]** Self-Initiated Imitation Learning Discovering what to imitate, Yasser Mohammad, Toyooki Nishida, International Conference on Control, Automation and Systems , pp. 726-732, Jeju, South Korea, 2012
- **[2012]** G-SteX: Greedy Stem Extension for Free-Length Constrained Motif Discovery, Yasser Mohammad, Toyooki Nishida, International Conference on Industrial, Engineering, Other Applications of Applied Intelligent Systems IEA/AI, pp. 417-426,
- **[2012]** Common Sensorimotor Representation for Self-Initiated Imitation Learning, Yasser Mohammad, Toyooki Nishida, International Conference on Industrial, Engineering, Other Applications of Applied Intelligent Systems IEA/AIE, pp. 381-390,
- **[2012]** CPMD: A Matlab Toolbox for Change Point and Constrained Motif Discovery, Yasser Mohammad, Toyooki Nishida, International Conference on Industrial, Engineering, Other Applications of Applied Intelligent Systems IEA/AIE, pp. 114-123,
- **[2011]** Discovering Causal Change Relationships Between Processes in Complex Systems, Yasser Mohammad, Toyooki Nishida, IEEE/SICE International Symposium on System Integratio, pp. 12-17,
- **[2011]** On Comparing SSA-based Change Point Discovery Algorithms, Yasser Mohammad, Toyooki Nishida, IEEE/SICE International Symposium on System Integration, pp. 938-945, **(Best Paper Award)**
- **[2010]** Incremental Gesture Discovery for Interactive Robots, Yasser Mohammad, Toyooki Nishida, IEEE International Conference on Robotics and Biomimetics ROBIO , pp. 185-189, Tianjin, China,
- **[2010]** Learning Interaction Protocols using Augmented Bayesian Networks Applied to Guided Navigation, Yasser Mohammad, Toyooki Nishida, Taipei, Taiwan, IEEE/RSJ International Conference on Intelligent Robots and Systems IROS, pp. 4119-4126,
- **[2010]** Learning Spontaneous Nonverbal Behavior using a Three Layers Hierarchy, Yasser Mohammad, Toyooki Nishida, 10th WSEAS International Conference on Applied Computer Science, pp. 430-435, Iwate, Japan, October
- **[2010]** Unsupervised Learning of Interactive Behavior for HRI, Yasser Mohammad, Toyooki Nishida, RSS Workshop on Learning for Human Robot Interaction Modeling, Zaragoza, Spain, June 2010
- **[2010]** Down-Up-Down Behavior Generation for Interactive Robots, Yasser Mohammad, Toyooki Nishida, The Twenty Third International Conference on Industrial, Engineering & Other Applications of Applied Intelligent Systems (IEA/AIE), pp. 92-101, Spain, June 2010
- **[2010]** Autonomous Development of Gaze Control for Natural Human-Robot Interaction, Yasser Mohammad, Toyooki Nishida, and Shogo Okada, ACM International Conference on Intelligent User Interfaces (IUI) workshop on Eye Gaze in Intelligent Human Machine Interaction, pp. 63-70.
- **[2009]** Unsupervised Simultaneous Learning of Gestures, Actions and their Associations for Human-Robot Interaction, Yasser Mohammad, Toyooki Nishida, and Okada Shogo, IEEE/RSJ International Conference on Intelligent Robots and Systems IROS , pp. 2537-2544, October 11 to 15, MO, USA, 2009
- **[2009]** Robust Singular Spectrum Transform, Yasser Mohammad, Toyooki Nishida, the Twenty Second International Conference on Industrial, Engineering & Other Applications of Applied Intelligent Systems (IEA/AIE), pp. 123-132, Taiwan, June 2009
- **[2009]** Measuring Naturalness During Close Encounters Using Physiological Signal Processing, Yasser Mohammad, Toyooki Nishida, Twenty Second International Conference on Industrial, Engineering & Other Applications of Applied Intelligent Systems (IEA/AIE), pp. 281-290, Taiwan, June 2009 **(Best Paper Award)**
- **[2009]** Learning Interaction Structure using a Hierarchy of Dynamical Systems, Yasser Mohammad, Toyooki Nishida, Twenty Second International Conference on Industrial, Engineering & Other Applications of Applied Intelligent Systems (IEA/AIE), pp 253-258, Taiwan, June 2009
- **[2008]** Toward Learning Interactive Behavior, Yasser Mohammad, In Proceedings of IEEE ICRA NEWHRI workshop (May 2008), Pasadena, USA
- **[2008]** The H3R Explanation Corpus: Human-Human and Base Human-Robot Interaction Dataset, Yasser Mohammad, Yong Xu, Kenichi Matsumura, and Toyooki Nishida, The Fourth International Conference on Intelligent Sensors, Sensor Networks and Information Processing (ISSNIP), pp. -206, Sydney, Australia, December.
- **[2008]** Constrained Motif Discovery, Yasser Mohammad, Toyooki Nishida, International Symposium on Data Mining and Statistical Science, Tokyo, Japan, pp. 16-19, September
- **[2008]** Human Adaptation to a Miniature Robot: Precursors of Mutual Adaptation, Yasser Mohammad, Toyooki Nishida, In Proceedings of IEEE 17th International Symposium on Robot and Human Interactive, pp. 124-129, Munich, Germany,
- **[2008]** Getting Feedback from a Miniature Robot, Yasser Mohammad, Toyooki Nishida, In Proceedings of IEEE International Conference on Informatics in Automation (ICIA), pp.941-947, China, June 2008
- **[2008]** Reactive Gaze Control for a Humanoid Robot, Yasser Mohammad, Toyooki Nishida, In Proceedings of IEEE International Conference on Robotics and Mechatronics (RAM), pp. 47-54, China, September 2008

- **[2008]** Toward Agents that can Learn Nonverbal Interactive Behavior, Yasser Mohammad, Toyoaki Nishida, In Proceedings of IAPR Workshop on Cognitive Information Processing, pp. 164-169, Greece, June
- **[2008]** A Cross-Platform Robotic Architecture for Autonomous Interactive Robots, Yasser Mohammad, Toyoaki Nishida, New Trends in Artificial Intelligence (The Twenty First International Conference on Industrial, Engineering & Other Applications of Applied Intelligent Systems (IEA/AIE), pp 108-117, Poland, 2008 (**Best Paper Award**)
- **[2007]** Intention Through Interaction: Toward Mutual Intention in Real World Interactions, Yasser Mohammad, Toyoaki Nishida, New Trends in Artificial Intelligence (Proceedings of IEA/AIE , Kyoto, Japan), pp. 115-125, 2007
- **[2008]** Two Layers Action Integration for HRI: Action Integration with Attention Focusing for Interactive Robots, Yasser Mohammad, Toyoaki Nishida, In Proceedings of the International Conference on Informatics in Control, Automation & Robotics (ICINCO),pp. 41-48, Funchal, Maderia, Portugal, May 2008
- **[2008]** Natural Listening Robot for AAL Applications, Yasser Mohammad, Toyoaki Nishida, In Proceedings of the first International Workshop on IUI for Ambient Assisted Living (IUI4AAL) in conjunction with the IUI 2008 conference, Canari Islands, Spain, 2008
- **[2008]** Natural Listening for a Humanoid Robot, Yasser Mohammad, Toyoaki Nishida, In Proceedings of the International Conference on Informatics Education and Research for Knowledge-Circolating Society (ICKS 2008), IEEE Press, pp. 153-156.
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