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受賞歴

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- [3] ロボカップジャパンオープン 2015 人工知能学会賞, 2015 年 5 月.
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- [5] 大阪大学総長顕彰, 2014 年 7 月.
- [6] Best Paper Research Award of the RAAD Workshop: Robotics in Alpe-Adria-Danube Region, 2013 年 9 月.
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- [8] 人工知能学会研究会優秀賞, 2013 年 6 月.
- [9] ロボカップジャパンオープン 2013 ロボカップ研究賞, 2013 年 5 月.
- [10] Best Paper Award Finalist of the 16th Annual RoboCup International Symposium, 2012 年 6 月.
- [11] 日本赤ちゃん学会第 12 回学術集会 最優秀ポスター発表賞, 2012 年 6 月.
- [12] ロボカップジャパンオープン 2012 人工知能学会賞, 2012 年 5 月.
- [13] Best Paper Award Finalist of the 16th IEEE International Symposium on Robot and Human Interactive Communication, 2008 年 8 月.
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- [2] **Yukie Nagai**, “TBA,” ICDL-EpiRob2017 Workshop on the Development of the Self: from self-perception to interaction under uncertainty, Lisbon, Portugal, September 18, 2017.
- [3] **Yukie Nagai**, “TBA,” International Symposium on Neuroscience of Consciousness: Beyond NCC, Chiba, Japan, July 24, 2017.
- [4] **Yukie Nagai**, “Computational models for cognitive development,” ISSA Summer School 2017, Osaka, May 22-June 2, 2017.
- [5] **Yukie Nagai**, “Predictive Learning: A Computational Account for Social Cognitive Development,” Lorentz Center Workshop “Perspectives on Developmental Robotics”, Leiden, the Netherlands, May 15-19, 2017.
- [6] **Yukie Nagai**, “Cognitive Mirroring: Computational Approach to Understanding and Assisting Autism Spectrum Disorder,” International Symposium on Constructive Approach to Cognitive Development and Disorders, Bielefeld University, Bielefeld, Germany, March 13, 2017.

- [7] **Yukie Nagai**, “Predictive learning: Its key role in cognitive development,” The 3rd International Symposium on Cognitive Neuroscience Robotics: Toward Constructive Developmental Science, Osaka, Japan, December 11-13, 2016.
- [8] **Yukie Nagai**, “Predictive Learning: A Computational Theory for Cognitive Development,” Lecture at Radboud University, Nijmegen, Netherlands, November 10, 2016.
- [9] **Yukie Nagai**, “Learning with motionese: Human-robot interaction inspired by caregiver-infant interaction,” IROS 2016 Workshop on Human-Robot Collaboration: Towards Co-Adaptive Learning Through Semi-Autonomy and Shared Control, Daejeon, Korea, October 10, 2016.
- [10] **Yukie Nagai**, “From cognition to social interaction based on predictive learning,” IROS 2016 Workshop on Bio-inspired Social Robot Learning in Home Scenarios, Daejeon, Korea, October 10, 2016.
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- [16] **Yukie Nagai**, “How ASD sees the world: Computational approaches to understanding atypical perception,” International Workshop on Cognitive Development for Friendly Robots and Rehabilitation, Genoa, Italy, December 2-3, 2015.
- [17] **Yukie Nagai**, “Predictive Learning of Sensorimotor Information as a Key for Cognitive Development,” Humanoids 2015 Workshop on Towards Intelligent Social Robots - Current Advances in Cognitive Robotics, Seoul, Korea, November 3, 2015.
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- [28] **Yukie Nagai**, “Computational Methods to Analyze the Dynamics of Infant-Caregiver Interaction,” ICIS 2014 Pre-Conference on Head-Mounted Eye Tracking, Berlin, Germany, July 2014.
- [29] **Yukie Nagai**, “An Interaction-Based Development of Human-Robot Joint Attention and Self/Other Cognition,” International Conference: Going Beyond the Laboratory - Ethical and Societal Challenges for Robotics, Delmenhorst, Germany, February 2014.
- [30] **Yukie Nagai**, “What can robotics teach us about self-other recognition?,” CiNet Friday Lunchtime Seminar Series, CiNet, Osaka, Japan, January 2014.
- [31] **Yukie Nagai**, “Designing Teachable Robots: How to take multidimensionality of mind perception into account?,” IROS 2013 Workshop on Towards Social Humanoid Robots: What makes interaction human-like?, Tokyo, Japan, November 2013.
- [32] **Yukie Nagai**, “Contingency as a key for cognitive development: From self-other recognition to joint attention,” IROS 2013 Workshop on Cognitive Robotics Systems: Replicating Human Actions and Activities, Tokyo, Japan, November 2013.
- [33] **Yukie Nagai**, “Development of Self through Other: Emergence of Mirror Neuron System and Social Interaction,” RobotDoc International Conference on Development of Cognition, Osaka, Japan, August 2013.
- [34] **Yukie Nagai**, “Developmental Robotics to Investigate Interpersonal Coordination,” CogSci 2013 Workshop on Embodied Approaches to Interpersonal Coordination: Infants, Adults, Robots, and Agents, Berlin, Germany, July 2013.
- [35] **Yukie Nagai**, “How social interaction shapes the way robots learn,” HRI 2013 Workshop on Collaborative Manipulation: New Challenges for Robotics and HRI, Tokyo, Japan, March 2013.
- [36] **Yukie Nagai**, “Can Robots Learn to Communicate like Infants?,” Houston University, Houston, TX, USA, November 2012.
- [37] **Yukie Nagai**, “The Importance of Starting Small in Robot Learning: Lessons from Human Intelligence,” The 15th International Conference on Artificial Intelligence: Methodology, Systems, Applications, Varna, Bulgaria, September 2012.
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- [40] **Yukie Nagai**, “Reading Intentions from Motionese: Analyzing and Designing Caregiver-Infant Interaction,” Workshop on “Reading intentions: From children to robots,” Lund, Sweden, March 2012.
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- [47] **Yukie Nagai**, “Investigating Pedagogy by Modeling Infant Visual Attention,” Workshop at the Annual Meeting of the Cognitive Science Society ‘Intuitive Pedagogical Reasoning: An Interdisciplinary Workshop,’ Amsterdam, Netherland, July 2009.
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- [52] **Yukie Nagai**, “Robots that learn to establish joint visual attention,” PRI Cooperative Research Workshop “Gaze, Joint Attention, and Theory of Mind,” Aichi, Japan, August 2005.
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- [2] 長井志江, “自閉スペクトラム症の視覚世界を体験 ~対人コミュニケーションの難しさの理由に迫る~, ” 泉北支援教育研究会総会・研修会, 大阪, 2017年6月12日.
- [3] 長井志江, “ロボットが人の気持ちを分かるようになる仕組み,” シンポジウム「HANDAI ロボット展から始まるロボットとの共生社会」, 大阪, 2017年5月13日.
- [4] 長井志江, “家族も支援者も自閉スペクトラム症のしている世界を体験したい - 阪大・東大グループによるシミュレータ開発の経緯と成果 -,” 一般社団法人 WAKUWAKU PROJECT JAPAN 第2回信州・諏訪発: 発達障害児・者と家族を応援するための講演会, 諏訪, 2017年4月23日.
- [5] 長井志江, “人を理解するための人工知能研究: 認知発達ロボティクスがもたらす未来,” Girls in Tech Japan 「AI 人工知能のこれから ~技術は短中長期的にどう社会に貢献するか~」, 大阪, 2017年2月23日.
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- [10] 長井志江, “乳幼児の自己と他者の心の発見: 認知発達ロボティクスから考える社会脳の芽生え,” 日本学術会議「脳と意識」・「神経科学」・「脳とこころ」分科会合同市民公開シンポジウム: 自己を知る脳・他者を理解する脳~融合的アプローチによる社会脳研究の魅力~, 日本学術会議講堂, 東京, 2016年9月10日.
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- [14] 長井志江, “自閉スペクトラム症の視覚世界を体験,” Handai-Asahi 中之島塾, 大阪大学中之島センター, 大阪, 2015年12月19日.
- [15] 長井志江, “自閉スペクトラム症知覚体験シミュレータ ~障害のディスカバリー支援~, ” 関東当事者研究交流集会 2015 夏, 東京大学, 2015年8月9日.
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その他

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研究資金

競争的資金

- [1] JST 戦略的創造研究推進事業 (CREST) “認知ミラーリング: 認知過程の自己理解と社会的共有による発達障害者支援,” 2016年12月-2022年3月.
役割: 代表, 研究経費: 139,600,000円 (総額 300,000,000円)
- [2] 革新的イノベーション創出プログラム (COI STREAM)(サテライト) “脳の個性を生かした子どもの健やかなこころの育成: 特異から得意へのパラダイムシフト,” 2014年4月-2022年3月.
役割: 分担 (代表: 三邊義雄), 研究経費: 12,308,000円
- [3] 科学研究費補助金及び学術研究助成基金助成金 若手研究 (A) “発達の制約を利用した自他認知からの心の理論の獲得: 構成的手法による研究” (研究課題番号: 25700027), 2013年4月-2016年3月.
役割: 代表, 研究経費: 18,800,000円
- [4] 科学研究費補助金 新学術領域研究 (研究領域提案型) (総括班) “構成論的発達科学 胎児からの発達原理の解明に基づく発達障害のシステムの理解” (研究課題番号: 24119001), 2012年6月-2017年3月.
役割: 分担 (代表: 國吉康夫), 研究経費: 3,460,000円
- [5] 科学研究費補助金 新学術領域研究 (研究領域提案型) (計画研究) “社会的認知発達モデルとそれに基づく発達障害者支援システム構成論” (研究課題番号: 24119003), 2012年6月-2017年3月.
役割: 代表, 研究経費: 85,300,000円
- [6] 科学研究費補助金 特別推進研究 “神経ダイナミクスから社会的相互作用に至る過程の理解と構築による構成的発達科学” (研究課題番号: 24000012), 2012年5月-2017年3月.
役割: 分担 (代表: 浅田稔), 研究経費: 8,500,000円
- [7] 学術研究助成基金助成金 挑戦的萌芽研究 “共感覚を利用したマルチモーダルな情動抽出” (研究課題番号: 24650083), 2012年4月-2014年3月.
役割: 代表, 研究経費: 3,000,000円
- [8] JSPS 研究拠点形成事業 A. 先端拠点形成型 “認知脳理解に基づく未来工学創成のための競創的パートナーシップ,” 2012年4月-2017年3月.
役割: 分担 (代表: 浅田稔), 研究経費: 5,000,000円
- [9] 科学研究費補助金 基盤研究 (A) “非意識下プロセスにおけるワーキングメモリの脳内機構: 意識下と麻酔下との比較” (研究課題番号: 23240036), 2011年4月-2016年3月.
役割: 分担 (代表: 苧阪満里子), 研究経費: 1,200,000円
- [10] 科学研究費補助金 基盤研究 (S) “構成的手法による身体バブリングから社会性獲得にいたる発達過程の理解と構築” (研究課題番号: 22220002), 2010年4月-2015年3月 (特別推進研究に移行のため2012年6月終了).
役割: 分担 (代表: 浅田稔), 研究経費: 16,450,000円

- [11] Research Grant provided by Research Institute for Cognition and Robotics, Bielefeld University “Designing Human-Robot Interaction based on / toward Understanding Parent-Infant Interaction,” 2008年–2011年 (異動のため 2009年9月終了).
Role: Project Leader, Budget: EUR39,300

その他の助成

- [1] 大阪大学国際共同研究促進プログラム (短期人件費支援) “教示者の発話と運動呈示を利用したヒューマノイドロボット iCub による複雑な動作学習,” 2014年11月–2015年3月.
役割: 代表
- [2] 大阪大学最先端ときめき研究推進事業 “バイオサイエンスの時代における人間の未来,” 2010年8月–2015年3月.
役割: 分担 (代表: 檜垣立哉)
- [3] Cluster of Excellence “Cognitive Interaction Technology,” 2007年–2012年.
Role: Responsible Investigator (Coordinator: Helge Ritter)

各種委員会・学会活動

国際・国内会議実行委員会

- [1] General Co-Chair of the 5th International Conference on Human-Agent Interaction, 2017.
- [2] Publicity Co-Chair of the 7th Joint IEEE International Conference on Development and Learning and on Epigenetic Robotics, 2017.
- [3] Advisory Board of the 4th International Conference on Human-Agent Interaction, 2016.
- [4] General Co-Chair of the 11th ACM/IEEE International Conference on Human-Robot Interaction, 2016.
- [5] Workshops and Tutorials Co-Chair of the 2015 IEEE International Conference on Robotics and Automation, 2015.
- [6] Special Program Co-Chair of the 23rd IEEE International Symposium on Robot and Human Interactive Communication, 2014.
- [7] Publication Co-Chair of the 9th ACM/IEEE International Conference on Human-Robot Interaction, 2014.
- [8] General Chair of the 3rd Joint IEEE International Conference on Development and Learning and on Epigenetic Robotics, 2013.
- [9] Program Chair of the 2nd Joint IEEE International Conference on Development and Learning and on Epigenetic Robotics, 2012.
- [10] Publicity Chair of the 1st Joint IEEE International Conference on Development and Learning and on Epigenetic Robotics, 2011.
- [11] Registration Chair of the 5th ACM/IEEE International Conference on Human-Robot Interaction, 2010.
- [12] Communication Chair of the 4th IEEE International Conference on Development and Learning, 2005.

国際・国内会議プログラム委員会

- [1] Program Committee of the IEEE International Conference on Development and Learning and on Epigenetic Robotics, 2011–2017.
- [2] Program Committee of the ACM/IEEE International Conference on Human-Robot Interaction, 2011–2018.

- [3] Program Committee of the IEEE-RAS International Conference on Humanoid Robots, 2012–2016.
- [4] Program Committee of the IEEE International Symposium on Robot and Human Interactive Communication, 2016–2017.
- [5] Program Committee of the IEEE/RSJ International Conference on Intelligent Robots and Systems, 2017.
- [6] Program Committee of the HRI Pioneers Workshop, 2012–2016.
- [7] Program Committee of the RO-MAN2015-WS “Emotion for Social Robotics,” 2015.
- [8] Program Committee of the Annual Meeting of the Cognitive Science Society, 2015.
- [9] Program Committee of the 1st International Workshop on Emotion for Sociable Agents, 2014.
- [10] Program Committee of the International Joint Workshop on Advanced Sensing / Visual Attention and Interaction, 2013.
- [11] Program Committee of the IROS2012-WS “Human Behavior Understanding,” 2012.
- [12] Program Committee of the WCCI2012 Special Session “Bio-Inspired Developmental Mechanisms,” 2012.
- [13] Program Committee of the IEEE International Conference on Development and Learning, 2006–2010.
- [14] Program Committee of the International Conference/Workshop on Epigenetic Robotics, 2005–2010.
- [15] Program Committee of the HAI (Human-Agent Interaction) Symposium, 2011–2012.
- [16] Program Committee of the International Workshop on Gaze Sensing and Interactions, 2010.
- [17] Program Committee of the 3rd International Conference on Human System Interaction, 2010.
- [18] Program Committee of the International Workshop on Robotics for Young Researchers, 2009.
- [19] Program Committee of the 4th International Symposium on Imitation in Animals and Artifacts, 2007.
- [20] Program Committee of the 2006 Robotics: Science and Systems Conference, 2006.

その他

- [1] Special Issues Editor for Journal of Human-Robot Interaction, 2017–now.
- [2] Vice Chair of Autonomous Mental Development Technical Committee, Computational Intelligence Society of IEEE, 2012–now.
- [3] IEEE CIS Technical Committee on Autonomous Mental Development, 2011–now.
- [4] IEEE RAS Technical Committee on Cognitive Robotics, 2014–now.
- [5] Steering Committee of Human-Robot Interaction, 2014–now.
- [6] Review Editor of Frontiers in Neurorobotics, 2011–now.
- [7] Review Editor of Frontiers in Robotics and AI: Humanoid Robotics, 2014–now.
- [8] Scientific and Usage Advisory Board for EARS (Embodied Audition for RobotS) project, 2014–now.
- [9] Organizer of the HAI2017 Workshop on “Representation learning for human and robot cognition,” 2017.
- [10] Organizer of the IROS2016 Workshop on “Bio-inspired Social Robot Learning in Home Scenarios,” 2016.
- [11] Organizer of the ICAR2015 Workshop on “Robot Learning: Bottom-up and top-down development of robot skills,” 2015.

- [12] Organizer of the HRI2015 Workshop on “Cognition: A Bridge between Robotics and Interaction,” 2015.
- [13] Organizer of the HRI2014 Workshop on “HRI: a bridge between Robotics and Neuroscience,” 2014.
- [14] Organizer of the IJCNN2014 Special Session “Cognition and Development,” 2014.
- [15] Organizer of the ICDL-EpiRob2013 Special Session “Constructive Developmental Science: Two Endeavors toward Understanding Human Development,” 2013.
- [16] Organizer of the Humanoids2012 Workshop on “Can developmental robotics yield human-like cognitive abilities?,” 2012.
- [17] Organizer of the Workshop on Robot Anthropology, 2012.
- [18] Organizer of the IROS Workshop on “Cognitive Neuroscience Robotics,” 2011–2013.
- [19] Organizer of the Bielefeld-Osaka Workshop on Cognition and Robotics, 2011.
- [20] Organizer of the ICDL-EpiRob2011 Special Session “How can human scaffolding support robots learning?,” 2011.
- [21] Organizer of the HRI2011 Workshop on “The role of expectations in intuitive human-robot interaction,” 2011.
- [22] Organizer of the Bielefeld-Osaka Workshop, 2010.
- [23] 日本ロボット学会展開セッション「GCOE 認知脳理解に基づく未来工学創成」オーガナイザ, 2010–2013.
- [24] 日本ロボット学会展開セッション「構成論的発達科学 胎児からの発達原理の解明に基づく発達障害のシステムの理解」オーガナイザ, 2013.
- [25] 日本赤ちゃん学会第 13 回学術集会シンポジウム「構成（論）的発達科学の新展開」オーガナイザ, 2013.

学生指導

博士論文

- [1] Jimmy Baraglia, “Prediction Error Minimization for the Emergence of Prosocial Helping Behavior,” 2016 年度大阪大学.

修士論文

- [1] Jorge Luis Copete Vasco, “A Computational Model for Development of Action Recognition in Synchronization with Development of Action Production,” 2015 年度大阪大学.
- [2] 黒木隆大, “色 情動の対応関係に基づく自閉症スペクトラム障害者の他者情動認識支援,” 2014 年度大阪大学.
- [3] Shibo Qin, “Synthetic Approach to the Relationship between Audiovisual Stimuli and Atypical Perception in Autism Spectrum Disorder,” 2014 年度大阪大学.
- [4] 大嶋悠司, “統語範疇の精緻化に基づく言語産出・理解発達の計算論モデル,” 2013 年度大阪大学.
- [5] 角田龍平, “顕著性と予測誤差に基づく選好性の相互作用による注視対象選択のモデル化,” 2013 年度大阪大学.
- [6] 森脇嵩量, “自閉症スペクトラム障害における部分的情報処理バイアスの発達モデル,” 2013 年度大阪大学.
- [7] 河合祐司, “生体運動の持つ運動指令と視覚情報の不変性に基づく生物らしさ検出モデル,” 2012 年度大阪大学.
- [8] 福嶋雄基, “予測的視線移動の発達メカニズム：時間窓の拡大をともなう注視対象の予測学習,” 2012 年度大阪大学.

- [9] 堀井隆斗, “乳児期の触覚優位性に基づく感情分化モデル,” 2012 年度大阪大学.
- [10] 小松広樹, “環境へ与える効果を基にした階層的な動作シンボルの生成,” 2011 年度大阪大学.
- [11] 田中剛, “非明示的な動き情報を利用した物体の多様な機能認識システム,” 2011 年度大阪大学.
- [12] 丁畑亮, “胎児期の環境的拘束が導く聴覚と運動のクロスモーダル表現の獲得,” 2011 年度大阪大学.
- [13] 中谷明子, “移動エントロピーを用いた親子間相互作用における随伴性発達の構成的理解,” 2011 年度大阪大学.

卒業論文

- [1] Shibo Qin, “Elucidating Spatiotemporal Contingency by Measuring Information Transfer in Caregiver-Infant Interaction,” 2012 年度大阪大学.
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技能

言語: 日本語 (母国語), 英語 (流暢), ドイツ語 (基礎)

コンピュータ関連: Mac OS/Linux/Windows, C/C++, OpenCV, OpenGL, R, Latex