

東北大学 電気通信研究所  
**研究室外部評価 参考資料**  
(2013 年度-2018 年度)

**Research Laboratory Reference Data  
for External Review**

April 2013 – March 2019  
(FY. 2013–2018)

**Research Institute of Electrical Communication  
Tohoku University**

コミュニケーションネットワーク研究室

Communication Network

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## 1. 研究成果 / Research Achievements

### (1)査読付学術論文 / Refereed journal papers (Total: 30)

1. Khamisi Kalegele, Hideyuki Takahashi, Johan Sveholm, Kazuto Sasai, Gen Kitagata, Tetsuo Kinoshita, "Numerosity Reduction for Resource Constrained Learning," *Journal of Information Processing (JIP)*, Vol.21, No.2, pp.329-341, Apr. 2013.
2. Akiko Takahashi, Tetsuo Kinoshita, "Dynamic Control and Construction Method for Multiagent Systems Based on an Evolutional Agent System," *International Journal of Energy, Information and Communications*, Vol.4, No.2, pp.1-20, Apr. 2013.
3. Taishi Ito, Yasuhiro Kurita, Hideyuki Takahashi, Kazuto Sasai, Gen Kitagata, Tetsuo Kinoshita, "A Cooperative Multi-agent System Infrastructure for Heterogeneous Sensor Environment," *International Journal of Energy, Information and Communications*, Vol.4, No.2, pp.55-70, Apr. 2013.
4. 高橋秋典, 五十嵐隆治, 上田浩, 岩谷幸雄, 木下哲男, "R/S Pox レッグライン特性," *情報処理学会論文誌*, Vol.54, No.6, pp.1761-1770, June 2013.
5. Khamisi Kalegele, Johan Sveholm, Hideyuki Takahashi, Kazuto Sasai, Gen Kitagata, Tetsuo Kinoshita, "Multiagent-based processing and integration of system data," *International Journal of Intelligent Systems Technologies and Applications*, Vol.12, No.2, pp.128-155, Sep. 2013.
6. Wenpeng Wei, Hideyuki Takahashi, Takahiro Uchiya, Tetsuo Kinoshita, "Cooperation Protocol Design Method for Repository-based Multi-agent Applications," *The International Journal of Software Science and Computational Intelligence (IJSSCI)*, Vol.5, No.2, pp.1-14, Apr.-June 2013.
7. Tetsuo Kinoshita, Gen Kitagata, Hideyuki Takahashi, Kazuto Sasai, Khamisi Kalegele, "An Agent-based Network Management System Using Active Information Resources," *International Journal of Advanced Smart Convergence (IJASC)*, Vol.2, No.2, pp. 10-15, Nov. 2013.
8. Yujin Lim, Jaesung Park, Hak-Man Kim, Tetsuo Kinoshita, "A Bargaining approach to optimizing load shedding in islanded microgrid operation," *IETE Technical Review*, Vol.30, No.6, pp. 483-489, Nov.-Dec. 2013.
9. Yujin Lim, Hak-Man Kim, Tetsuo Kinoshita, "Distributed Load-Shedding System for Agent-Based Autonomous Microgrid Operations," *Energies*, Vol.7, No.1, pp. 385-401, Jan. 2014.
10. Takumi Kato, Hideyuki Takahashi, Kazuto Sasai, Gen Kitagata, Hak-Man Kim, Tetsuo Kinoshita, "Priority-Based Hierarchical Operational Management for Multiagent-Based Microgrids," *Energies*, Vol.7, No.4, pp.2051-2078, Mar. 2014.
11. Yujin Lim, Hak-Man Kim, Jaesung Park, Tetsuo Kinoshita, "A Game Theoretic Approach for Load Shedding in the Islanded Microgrid," *INFORMATION JOURNAL*, Vol.17, No.3, pp.867-876, Mar. 2014.
12. 南野謙一, 田村亘, 木下哲男, "大学全入時代の多様な学生を対象とした研究活動支援のための協調的な学習方式," *電子情報通信学会論文誌 D*, Vol.J97-D, No.5, pp.914-922, May 2014.
13. Tetsuo Kinoshita, Gen Kitagata, Hideyuki Takahashi, Kazuto Sasai, Khamisi Kalegele, "A Knowledge-based Network Management System Using Active Information Resources," *International Journal of Advanced Smart Convergence*, Vol.3, No.1, pp.1-6, May 2014.
14. Wenpeng Wei, Akiko Takahashi, Tetsuo Kinoshita, "Design and Evaluation of Energyconsumption-aware Evolutional Agent System for Portable Devices," *Journal of Information Processing*, No.22, Vol.4, pp.660-668, Oct. 2014.
15. Tetsuo Kinoshita "Basic Characteristics of a Macroscopic Measure for Detecting Abnormal Changes in a Multiagent System," *Sensors*, Vol. 15, No. 4, pp.9112-9135, Apr. 2015.
16. Khamisi Kalegele, Kazuto Sasai, Hideyuki Takahashi, Gen Kitagata, Tetsuo Kinoshita "Four Decades of Data Mining in Network and Systems Management," *IEEE Transactions on Knowledge and Data Engineering*, Vol.27, No.10, pp.2700-2716, Oct. 2015.

17. Kazuto Sasai, Yukio-Pegio Gunji, Tetsuo Kinoshita, "Extremely localized interaction in a market model," *Artificial Life and Robotics*, pp.1-5, Nov. 2016. (doi:10.1007/s10015-016-0334-1)
18. Takahiro Uchiya, Masato Hibino, Ichi Takumi, Tetsuo Kinoshita, "Design and Implementation of Agent Environment for Developing Nash-Q Learning Agents," *International Journal of Energy, Information and Communications*, Vol. 8, No. 1, pp.39-50, Feb. 2017.
19. Kazuto Sasai, Yusuke Tanimura, Hideyuki Takahashi, Gen Kitagata, Tetsuo Kinoshita, "An Agent-based Data Analytics Support Tool for Network Management Intelligence," *International Journal of Energy, Information and Communications*, Vol. 8, No. 1, pp.51-64, Feb. 2017.
20. Lana Sinapayen, Keisuke Nakamura, Kazuhiro Nakadai, Hideyuki Takahashi, Tetsuo Kinoshita, "Swarm of Micro-Quadcopters for Consensus-based Sound Source Localization," *Advanced Robotics*, Vol.31, No.12, pp.624-633, Apr. 2017. (DOI: 10.1080/01691864.2017.1310632)
21. 福谷遼太, 安藤明伸, 板垣翔大, 高橋秀幸, 木下哲男, "技術科教育における技能学習管理システムのための木製加工物評価支援機構の提案," *情報処理学会論文誌:コンシューマ・デバイス&システム (CDS)*, Vol.7, No.2, pp.51-63, May 2017.
22. Yusuke Tanimura, Kazuto Sasai, Gen Kitagata, Tetsuo Kinoshita, "Knowledge-Based Network Management System for Movable and Deployable ICT Resource Unit," *Journal of Computer and Communications*, Vol.5, No.7, pp.135-151, May 2017. (DOI: 10.4236/jcc.2017.57013)
23. Takumi Kato, Hideyuki Takahashi, Tetsuo Kinoshita, "Multiagent-based Autonomic and Resilient Service Provisioning Architecture for the Internet of Things," *International Journal of Computer Science and Network Security*, Vol.17, No.6, pp.36-58, June 2017.
24. Kazuto Sasai, Yukio-Pegio Gunji, Tetsuo Kinoshita, "Intermittent Behavior Induced By Asynchronous Interactions In A Continuous Double Auction Model," *Advances in Complex Systems*, Vol.20, No.02n03, pp.1750005 (21 pages), July 2017. (DOI: 10.1142/S0219525917500059)
25. Yusuke Tanimura, Kazuto Sasai, Gen Kitagata, Tetsuo Kinoshita, "Analysis of the Macroscopic Behavior of Server Systems in the Internet Environment," *Applied Sciences*, Vol.7, No.11, pp.1145, Nov. 2017. (DOI:10.3390/app7111145)
26. 今井信太郎, 今野翔太, 北形元, 新井義和, 猪股俊光, "災害時の間欠的アクセスを可能にする不揮発性ネットワークの設計と評価," *電子情報通信学会論文誌 B*, Vol. Jxx-B, No.xx, pp.1-9, Jan. 2018. (DOI:DOI:10.14923/transcomj.2017MOP0007)
27. Ryota Fukutani, Shota Itagaki, Hideyuki Takahashi, Akinobu Ando, Tetsuo Kinoshita, "Development and Evaluation of a Workpiece Evaluation Support Mechanism for Students," *Information Engineering Express International Institute of Applied Informatics*, Vol.4, No.1, pp.63-75, Mar. 2018.
28. Kaho Takahashi, Takumi Kato, Tetsuo Kinoshita, "Memory Recall Support System Based on Active Acquisition and Accumulation of Memory Fragments," *Big Data and Cognitive Computing*, Vol.2, No.2, 12, May 2018. (DOI:0.3390/bdcc2020012)
29. 菅原研次, 木下哲男, 顧優輝, "IoT アプリケーションを開発するためのエージェント指向技術," *知能と情報 (日本知能情報フuzzy学会誌)*, Vol.30, No.3, pp.148-156, June 2018.
30. Goutam Chakraborty, Takuya Kamiyama, Hideyuki Takahashi, Tetsuo Kinoshita, "An Efficient Anomaly Detection in Quasi-Periodic Time Series Data—A Case Study with ECG," *Time Series Analysis and Forecasting, Selected Contributions from ITISE 2017*, Springer, I. Rojas et al.(eds.), ISSN 1431-1968, Contributions to Statistics, ISBN 978-3-319-96944-2 (eBook), pp.147-157, Oct. 2018. DOI:10.1007/978-3-319-96944-2

(3)査読付国際会議 / Papers in refereed conference proceedings (Total: 66)

1. Yusuke Tanimura, Johan Sveholm, Kazuto Sasai, Gen Kitagata, Tetsuo Kinoshita, "A Knowledge-based Support Method for Autonomous Service Operations after Disasters," Proc. of the 12th IEEE/ACIS International Conference on Computer and Information Science (ICIS 2013), pp.229-233, June 2013.
2. Motohiro Shibakawa, Takahiro Uchiya, Ichi Takumi, Tetsuo Kinoshita, "Design and Implementation of Multiagent-based Distributed Backup System," Proc. of the 12th IEEE/ACIS International Conference on Computer and Information Science (ICIS 2013), June 2013.
3. Takahiro Uchiya, Syo Itazuro, Ichi Takumi, Tetsuo Kinoshita, "Design Environment of Intelligent Multiagent Systems," Proc. of the 12th IEEE/ACIS International Conference on Computer and Information Science (ICIS 2013), pp.235-240, June 2013.
4. Shota Kotato, Aki Asanuma, Wenpeng Wei, Hideyuki Takahashi, Tetsuo Kinoshita, "Interactive Information Delivery System based on Active Information Resources," Proc. of the 12th IEEE/ACIS International Conference on Computer and Information Science (ICIS 2013), pp.247-250, June 2013.
5. Takahiro Uchiya, Syo Itazuro, Ichi Takumi, Tetsuo Kinoshita, "IDEAL: Interactive Design Environment for Agent System with Learning Mechanism," Proc. of the 12th IEEE International Conference on Cognitive Informatics and Cognitive Computing (ICCI\*CC2013), pp.153-160, July 2013.
6. Wenpeng Wei, Akiko Takahashi, Tetsuo Kinoshita, "Design of Energy-consumption-aware Evolutional Agent System for Portable Devices," Proc. of the 12th IEEE International Conference on Cognitive Informatics and Cognitive Computing (ICCI\*CC2013), pp.254-259, July 2013.
7. Motohiro Shibakawa, Takahiro Uchiya, Ichi Takumi, Tetsuo Kinoshita, "Development of the Distributed Backup System using Multi-Agent Technology," Proc. of the 12th IEEE International Conference on Cognitive Informatics and Cognitive Computing (ICCI\*CC2013), pp.268-273, July 2013.
8. Takumi Kato, Hideyuki Takahashi, Kazuto Sasai, Yujin Lim, Hak-Man Kim, Gen Kitagata, Tetsuo Kinoshita, "Multiagent System for Priority-Based Load Shedding in Microgrid," Proc. of the 1st IEEE International Workshop on Consumer Devices and Systems held in conjunction with the IEEE Signature Conference on Computers, Software & Applications (COMPSAC2013), pp.540-545, July 2013.
9. Khamisi Kalegele, Hideyuki Takahashi, Kazuto Sasai, Gen Kitagata, Tetsuo Kinoshita, "A Data Reservoir Agent for KDD-based Systems Analytics," Proc. of the 2nd International Workshop on Smart Technologies for Energy, Information and Communication (STEIC2013), pp.43-50, Aug. 2013.
10. Yusuke Tanimura, Johan Sveholm, Kazuto Sasai, Gen Kitagata, Tetsuo Kinoshita, "An Autonomic Network Service Management using Knowledge-based Support System," Proc. of the 2nd International Workshop on Smart Technologies for Energy, Information and Communication (STEIC2013), pp.96-104, Aug. 2013.
11. Shota Kotato, Hideyuki Takahashi, Wei Wenpeng, Kazuto Sasai, Gen Kitagata, Tetsuo Kinoshita, "User-Oriented Information Delivery System based on Autonomous Cooperation of Heterogeneous Contents," Proc. of the 2nd International Workshop on Smart Technologies for Energy, Information and Communication (STEIC2013), pp.105-112, Aug. 2013.
12. Takumi Kato, Hideyuki Takahashi, Kazuto Sasai, Gen Kitagata, Kim Hak-Man, Tetsuo Kinoshita, "Multiagent-Based Management of Energy Demand and Supply Based on Priority in Microgrid," Proc. of the 2nd International Workshop on Smart Technologies for Energy, Information and Communication (STEIC2013), pp.157-165, Aug. 2013.
13. Anita Purba Nilam Hapsari, Takumi Kato, Hideyuki Takahashi, Kazuto Sasai, Gen Kitagata, Tetsuo Kinoshita, "Multiagent-based Microgrid with Electric Vehicle Allocation Planning," Proc. of the 2nd IEEE Global Conference on Consumer Electronics (GCCE 2013), pp.436-437, Oct. 2013.
14. Takahiro Uchiya, Tetsuo Kinoshita, "Surveillance Architecture of Evolutional Agent System on Repository-based Agent Framework," Proc. of the 3rd International Workshop on Symbiotic Computing and Multiagent Systems (SCMAS-2013), Oct. 2013.

15. Johan Sveholm, Khamisi Kalegele, Yusuke Tanimura, Kazuto Sasai, Gen Kitagata, Tetsuo Kinoshita, "A Knowledge-based Autonomous Service Management System in Emergency Situations," Proc. of the 5th IEEE International Conference on Awareness Science and Technology (iCAST2013), pp.109-113, Nov. 2013.
16. Khamisi Kalegele, Hideyuki Takahashi, Kazuto Sasai, Gen Kitagata, Tetsuo Kinoshita, "System Monitoring Models as Active Information Resources," Proc. of the 5th IEEE International Conference on Awareness Science and Technology (iCAST2013), pp.226-230, Nov. 2013.
17. Tetsuo Kinoshita, Gen Kitagata, Hideyuki Takahashi, Kazuto Sasai, Khamisi Kalegele, "A Knowledge-based Network Management System Using Active Information Resources," Proc. of the 1st International Symposium on Advanced and Applied Convergence (ISAAC 2013), Nov. 2013.
18. Kazuto Sasai, Yuki-Pegio Gunji, Tetsuo Kinoshita, "A Model of Market Behavior based on Time and Space Uncertainty," Proc. of The Nineteenth International Symposium on Artificial Life and Robotics (AROB 19th 2014), Jan. 2014.
19. Shintaro Imai, Syota Konno, Gen Kitagata, Yoshikazu Arai, Toshimitsu Inomata, "Prototype Development of Access Queuing Function for Non-volatile Networking," Proc. of International Conference on Smart Technologies for Energy, Information and Communication 2014 (IC-STEIC2014), pp.4-10, Aug. 2014.
20. Gen Kitagata, Yukihiro Karakama, Taishi Ito, Hideyuki Takahashi, Kazuto Sasai, Tetsuo Kinoshita, "An Automatic VLAN Discovery Method based on IP Subnet Estimation," Proc. of International Conference on Smart Technologies for Energy, Information and Communication 2014 (IC-STEIC2014), pp.11-18, Aug. 2014.
21. Yuto Inaji, Yukio Iwaya, Akinori Takahashi, Ryuji Igarashi, Gen Kitagata, Tetsuo Kinoshita, "Behavior of Phase Transition Model in Information Network Traffic Attacked by Denial of Service," Proc. of International Conference on Smart Technologies for Energy, Information and Communication 2014 (IC-STEIC2014), pp.19-24, Aug. 2014.
22. Lana Sinapayen, Keisuke Nakamura, Kazuhiro Nakadai, Hideyuki Takahashi, Tetsuo Kinoshita, "Multi-agent based Sound Source Localization with Multicopters," Proc. of International Conference on Smart Technologies for Energy, Information and Communication 2014 (IC-STEIC2014), pp.95-102, Aug. 2014.
23. Takumi Kato, Ryo Chiba, Hideyuki Takahashi, Kazuto Sasai, Gen Kitagata, Tetsuo Kinoshita, "Agent-Oriented Middleware for Cooperation of Heterogeneous Devices," Proc. of International Conference on Smart Technologies for Energy, Information and Communication 2014 (IC-STEIC2014), pp.103-109, Aug. 2014.
24. Wenpeng Wei, Takumi Kato, Hideyuki Takahashi, Tetsuo Kinoshita, "A Method of Autonomous Control Knowledge Construction for Evolutional Agent Systems," Proc. of International Conference on Smart Technologies for Energy, Information and Communication 2014 (IC-STEIC2014), pp.119-129, Aug. 2014.
25. Kazuto Sasai, Yukio-Pegio Gunji, Tetsuo Kinoshita, "Heterarchical Interaction Model for Auction-based Multiagent Negotiation Mechanism," The 2014 IEEE/WIC/ACM International Conference on Intelligent Agent Technology (IAT2014), Aug. 2014.
26. Akiko Takahashi, Makoto Oide, Mitsuru Abe, Tetsuo Kinoshita "Expansion and Evaluation of EAS to Provision Multimedia Communications Services in Heterogeneous Environments," Proc. of the 13th IEEE International Conference on Cognitive Informatics and Cognitive Computing (ICCI\*CC2014), pp.236-241, Aug. 2014.
27. Kazuto Sasai, Hideyuki Takahashi, Gen Kitagata, Tetsuo Kinoshita "AIR-space: Cognitive Cooperation Space for Active Information Resources based Network Management System," Proc. of the 13th IEEE International Conference on Cognitive Informatics and Cognitive Computing (ICCI\*CC2014), pp.482-489, Aug. 2014.
28. Takahiro Uchiya, Daisuke Yamamoto, Ryota Nishimura, Ichi Takumi, Tetsuo Kinoshita "Proposal of Voice Control-based Interactive Design Method of Agent System," Proc. of the 13th IEEE International Conference on Cognitive Informatics and Cognitive Computing (ICCI\*CC2014), pp.496-500, Aug. 2014.
29. Yuki Kishigami, Takahiro Uchiya, Ichi Takumi, Tetsuo Kinoshita "Proposal of Snapshot Management Mechanism for DASH Agent Framework," Proc. of the 13th IEEE International Conference on Cognitive Informatics and Cognitive Computing (ICCI\*CC2014), pp.501-505, Aug. 2014.

30. Lana Sinapayen, Keisuke Nakamura, Kazuhiro Nakadai, Hideyuki Takahashi, Tetsuo Kinoshita "Sound Source Localization with an Autonomous Swarm of Quadcopters," Proc. of the workshop on Modular and Swarm Systems — from Nature to Robotics of IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS2014), Sep. 2014.
31. Yusuke Hachiya, Shota Kotato, Hideyuki Takahashi, Tetsuo Kinoshita "Cooperation Mechanism of Heterogeneous Contents in User-Oriented Information Delivery System," Proc. of the 2014 IEEE 3rd Global Conference on Consumer Electronics (GCCE 2014), pp.24-25, Oct. 2014. (Outstanding Student Paper Award)
32. Takumi Kato, Ryo Chiba, Hideyuki Takahashi, Kazuto Sasai, Gen Kitagata, Tetsuo Kinoshita, "Multiagent-Based Cooperation Infrastructure for IoT Devices," Proc. of the 2014 IEEE 3rd Global Conference on Consumer Electronics (GCCE 2014), pp.571-572, Oct. 2014.
33. Tetsuo Kinoshita, Hideyuki Takahashi, Kazuto Sasai, Gen Kitagata, "User-Oriented Information Delivery System Using Active Information Resources," Advanced and Applied Convergence Letters (AACL 03), pp.240-243, Nov. 2014.
34. Takahiro Uchiya, Motohiro Shibakawa, Ichi Takumi, Tetsuo Kinoshita, "Multiagent-based distributed backup system for individuals," Proc. of 2005 IEEE/ACIS 14th International Conference on Computer and Information Science (ICIS), pp.361-366, June 2015.
35. Takumi Kato, Ryo Chiba, Hideyuki Takahashi, Tetsuo Kinoshita "Agent-Oriented Cooperation of IoT Devices towards Advanced Logistics," CDS 2015: 3rd IEEE International Workshop on Consumer Devices and Systems held in conjunction with the 39th Annual International Computers, Software & Applications Conference (COMPSAC2015) Workshop, pp.223-227, July 2015.
36. Masato Hibino, Takahiro Uchiya, Ichi Takumi, Tetsuo Kinoshita, "Development Tool of Q-Nash Learning Agent for Intelligent System," Proc. of the 18th International Conference on Network-Based Information Systems (NBIS-2015), pp.582-585, Sep. 2015.
37. Zhaoqing Peng, Takumi Kato, Hideyuki Takahashi, Tetsuo Kinoshita, "Intelligent Home Security System Using Agent-based IoT Devices," Proc. of the 4th IEEE Global Conference on Consumer Electronics (GCCE 2015), pp.313-314, Oct. 2015.
38. Masato Hibino, Takahiro Uchiya, Ichi Takumi, Tetsuo Kinoshita, "Development Support of Nash-Q Learning Agent on Agent Framework DASH," Proc. of the 4th IEEE Global Conference on Consumer Electronics (GCCE 2015), pp.296-297, Oct. 2015.
39. Kazuto Sasai, Yukio-Pegio Gunji, Tetsuo Kinoshita, "Extremely Local Interaction in the Market Model," Proc. of The Twenty-First International Symposium on Artificial Life and Robotics 2016 (AROB 21st 2016), pp.625-630, Jan. 2016.
40. Yoshitaka Kato, Takahiro Uchiya, Ichi Takumi, Tetsuo Kinoshita, "Development of Operations Support Mechanism for Wide-area Distributed Agent Repositories," Proc. of the 10th International Conference on Complex, Intelligent, and Software Intensive Systems (CISIS-2016), pp.321-326, July 2016. (The Workshops of the 10th International Conference on Complex, Intelligent and Software Intensive System (CISIS-2016) Best Paper Award を受賞)
41. Kazuto Sasai, Hideyuki Takahashi, Gen Kitagata, Tetsuo Kinoshita, "Prototypical Design and Implementation of an Intelligent Network Data Analysis Tool Collaborating with Active Information Resource," Proc. of the 29th International Conference on Industrial Engineering and Other Applications of Applied Intelligent Systems (IEA/AIE 2016), pp.1007-1018, Aug. 2016.
42. Kota Hayashi, Takahiro Uchiya, Ichi Takumi, Tetsuo Kinoshita, "Robot Utilization Method using Agent Technology for Establishment of Wireless Communication Path in Event of Disaster," Proc. of the 5th IEEE Global Conference on Consumer Electronics (GCCE 2016), pp.266-267, Oct. 2016.
43. Yusuke Miyahara, Takahiro Uchiya, Ichi Takumi, Tetsuo Kinoshita, "Prototype of Cloud-based Agent Framework for Public Use," Proc. of the 5th IEEE Global Conference on Consumer Electronics (GCCE 2016), pp.268-269, Oct. 2016.

44. Ken Ohno, Takahiro Uchiya, Ichi Takumi, Tetsuo Kinoshita, "Security Mechanism for DASH Agent Framework," Proc. of the 5th IEEE Global Conference on Consumer Electronics (GCCE 2016), pp.270-271, Oct. 2016.
45. Kaho Takahashi, Hideyuki Takahashi, Tetsuo Kinoshita, "Various Life Experiences Management Function for Episodic Memory Recall Support System," Proc. of the 5th IEEE Global Conference on Consumer Electronics (GCCE 2016), pp.515-516, Oct. 2016.
46. Takumi Kato, Hideyuki Takahashi, Tetsuo Kinoshita, "Multiagent-based Autonomic Service Organization Scheme for the Internet of Things," Proc. of the Sixth International Conference On Advances in Computing, Control and Networking (ACCN 2017), pp.109-113, Feb. 2017.(BEST PAPER AWARD を受賞)
47. Yusuke Tanimura, Kazuto Sasai, Gen Kitagata, Tetsuo Kinoshita, "Service Oriented Network Management with Knowledge-Based Network Management System in Fluctuating Environment," Proc. of the 18th IEEE/ACIS International Conference on Software Engineering, Artificial Intelligence, Networking and Parallel/Distributed Computing (SNPD 2017), pp.31-44, June 2017.
48. Ryota Fukutani, Shota Itagaki, Hideyuki Takahashi, Akinobu Ando, Tetsuo Kinoshita, "Development of a Workpiece Evaluation Support Mechanism for Students," Proc. of the 6th International Congress on Advanced Applied Informatics (AAI 2017), pp.740-745, July 2017.
49. Kazuto Sasai, Yukio Pegio Gunji, Tetsuo Kinoshita, "Heterarcical market: Dynamical interplay between time and space in the continuous interaction in a market model," AIP Conference Proceedings ((ICNAAM2016), Vol.1863, pp.360014, July 2017.
50. Goutam Chakraborty, Takuya Kamiyama, Hideyuki Takahashi, Tetsuo Kinoshita, "An Efficient Anomaly Detection in Quasi Periodic Time-series Data A Case Study with ECG," Proc. of the 4th edition of the International work-conference on Time Series (ITISE 2017), pp.563-574, Sep. 2017.
51. Kenta Katayama, Hideyuki Takahashi, Shingo Yokoyama, Karl Gäfvert, Tetsuo Kinoshita, "Evacuation Guidance Support Using Cooperative Agent-based IoT Devices," Proc. of the 6th IEEE Global Conference on Consumer Electronics (GCCE 2017), pp.98-99, Oct. 2017. (2nd Prize, IEEE GCCE 2017 Student Paper Award を受賞)
52. Shingo Yokoyama, Ryota Fukutani, Takumi Kato, Hideyuki Takahashi, Tetsuo Kinoshita, "MATCH: MultiAgent-based Tactful Cooperation Scheme for Heterogeneous IoT Devices," Proc. of the 6th IEEE Global Conference on Consumer Electronics (GCCE 2017), pp.150-151, Oct. 2017.
53. Takuya Hoshino, Yusuke Tanimura, Kazuto Sasai, Gen Kitagata, Tetsuo Kinoshita, "Support Mechanism for the Collaboration Between Humans and Agents in Network Management Tasks," Proc. of the 6th IEEE Global Conference on Consumer Electronics (GCCE 2017), pp.399-400, Oct. 2017.
54. Kazuto Sasai, Takuya Hoshino, Gen Kitagata, Tetsuo Kinoshita, "Collective interaction between humans and agents in the network management tasks," Proc. of The Twenty-Third International Symposium on Artificial Life and Robotics 2018 (AROB 23rd 2018), pp.670-673, Jan. 2018.
55. Kenta Katayama, Hideyuki Takahashi, Nobuhide Yokota, Kazuya Sugiyasu, Tetsuo Kinoshita, "Design and Implementation of Multiagent-based Evacuation Guidance Support System using UAVs," Proc. of The 9th IEEE International Conference on Awareness Science and Technology (iCAST 2018), pp.196-201, Sep. 2018.
56. Kazuto Sasai, Yukio Gunji, Tetsuo Kinoshita, "A Double Auction Model based on Weak Observation," Proc. of Conference on Complex Systems 2018 (CCS2018), Sep. 2018.
57. Hiroshi Matsumura, Ryota Fukutani, Kazuto Sasai, Gen Kitagata, Tetsuo Kinoshita, "Agent-based Smart Data Provisioning Mechanism for Supporting Network and System Administration Tasks," Proc. of 2018 IEEE 7th Global Conference on Consumer Electronics (GCCE 2018), pp.89-90, Oct. 2018.
58. Kazuto Sasai, Takuya Hoshino, Hiroki Nagawasa, Ryota Fukutani, Tetsuo Kinoshita, "A Flexible Collaboration Mechanism Between Humans and Agents on Disaster Recovery of Network Systems," Proc. of 2018 IEEE 7th Global Conference on Consumer Electronics (GCCE 2018), pp.187-188, Oct. 2018.



59. Kenta Katayama, Hideyuki Takahashi, Nobuhide Yokota, Kazuya Sugiyasu, Tetsuo Kinoshita, "Cooperation Scheme of Multi-UAVs for Evacuation Guidance Support," Proc. of 2018 IEEE 7th Global Conference on Consumer Electronics (GCCE 2018), pp.189-190, Oct. 2018.
60. Kazuya Sugiyasu, Shunsuke Sasaki, Naoki Araya, Hideyuki Takahashi, Nobuhide Yokota, Kenta Katayama, Michimasa Matsumoto, "Assessment Method of Tsunami Evacuating Behavior Used by GPS and GIS," Proc. of 2018 IEEE 7th Global Conference on Consumer Electronics (GCCE 2018), pp.191-192, Oct. 2018.
61. Takahiro Uchiya, Kota Hayashi, Ryuta Sugie, Ichi Takumi, Tetsuo Kinoshita, "Proposal of Disaster Information Collection Method by Robot," Proc. of 2018 IEEE 7th Global Conference on Consumer Electronics (GCCE 2018), pp.193-194, Oct. 2018.
62. Nobuhide Yokota, Hiroshi Yasaka, Kazuya Sugiyasu, Hideyuki Takahashi, "Motion Tolerance for Dynamic Object Recognition Using Visible Light IDs," Proc. of 2018 IEEE 7th Global Conference on Consumer Electronics (GCCE 2018), pp.667-668, Oct. 2018.
63. Goutam Chakraborty, Emiko Ikeda, Hideyuki Takahashi, Tetsuo Kinoshita, Cedric Bornand "Proposal of a Cheap Pulse Wave Velocity (PWV) Meter Using Photoplethysmography," Proc. of 2018 12th International Conference on Sensing Technology (ICST2018), Dec. 2018.
64. Kenta Katayama, Hideyuki Takahashi, Nobuhide Yokota, Kazuya Sugiyasu, Gen Kitagata, Tetsuo Kinoshita, "An Effective Multi-UAVs-based Evacuation Guidance Support for Disaster Risk Reduction," Proc. of the First International Workshop on Practical Issues, Systems & Applications for Disaster Risk Reduction in Smart Computing (DRRSC2019) in conjunction with the 6th IEEE International Conference on Big Data and Smart Computing (BigComp 2019), Feb. 2019.
65. Yusuke Tanimura, Kazuto Sasai, Tetsuo Kinoshita, "Proactive Service Management in Disaster Recovery Phase with Non-destructive Benchmarking Technique," Proc. of the First International Workshop on Practical Issues, Systems & Applications for Disaster Risk Reduction in Smart Computing (DRRSC2019) in conjunction with the 6th IEEE International Conference on Big Data and Smart Computing (BigComp 2019), Feb. 2019.
66. Kazuto Sasai, Takuya Hoshino, Ryota Fukutani, Tetsuo Kinoshita, "Collaboration mechanism between human administrators and agent-oriented network management systems," Proc. of the First International Workshop on Practical Issues, Systems & Applications for Disaster Risk Reduction in Smart Computing (DRRSC2019) in conjunction with the 6th IEEE International Conference on Big Data and Smart Computing (BigComp 2019), Feb. 2019.

(4) 査読なし国内研究会・講演会 / Proceedings in domestic conferences (Total: 123)

(省略) (Omitted)

(8) 著書 / Books

1. Kazuto Sasai, "A Review of Morphological Computation from a Perspective of Hierarchy," In Helmut Hauser, Rudolf M. Füchslin, Rolf Pfeifer (eds.), Opinions and Outlooks on Morphological Computation, ISBN 978-3-033-04515-6, 2014.

(10) 招待講演 / Invited Talks

1. T. Kinoshita, "Building User-oriented Network by Agents," IEICE Technical Committee on Mobile Network and Applications (MoNA)(Ishinomaki, Japan), Sep. 12, 2014.  
木下 哲男, "エージェントで創る利用者指向ネットワーク", 電子情報通信学会モバイルネットワークとアプリケーション研究専門委員会(MoNA)(石巻), 2014年9月12日.

## 2. 学会活動 / Activities in academic societies

### (1)学術的国際会議の企画・運営 / Planning and organizing academic international conferences.

1. Planning and organizing of the International Conference on Smart Technologies for Energy, Information and Communication (IC-STEIC 2014)(Chiba, Japan), 2014.
2. H. Takahashi, the First International Workshop on Practical Issues, Systems & Applications for Disaster Risk Reduction in Smart Computing (DRRSC 2019), Workshop Chair, 2018.

### (2)学術論文誌の編集・査読 / Editor and reviewer for academic journals.

1. T. Kinoshita, Int. Journal of Energy, Information and Communication, Editor-in-chief, 2013-2017.
2. G. Kitagata, Int. Journal of Energy, Information and Communication, Editor-in-chief, 2013-2017.
3. G. Kitagata, IEICE Technical Committee on Network Software (NWS), Editorial Board Member of Special Issue on Network Software, 2013-2018.  
北形 元, 電子情報通信学会ネットワークソフトウェア研究専門委員会, ネットワークソフトウェア特集号編集委員, 2013-2018.

## 3. 社会貢献 / Contributions to society

### (1) 教育活動 / Educational activities outside university

1. G. Kitagata, Lesson in high-school, Hakodate Chubu High School, 2013.  
北形 元, 出前授業, 函館中部高等学校, 2013.
2. G. Kitagata, Lesson in high-school, Koshigaya Kita High School, 2017.  
北形 元, 出前授業, 埼玉県立越谷北高等学校, 2017.

## 4. 競争的資金の獲得状況 / Research funds/grants received

### (1) 科学研究費補助金 / Grant-in-Aid for Scientific Research (KAKENHI)

1. G. Kitagata, “Research and development of a non-volatile networking technology for smooth communication under the large scale disaster situation,” Grant-in-Aid for Scientific Research (B), ¥18,200,000 (Direct Cost: ¥14,000,000, Indirect Cost: ¥4,200,000), FY. 2012-2014.  
北形元, “大規模災害時の円滑な通信を実現する不揮発性ネットワークング技術の研究開発”, 基盤研究(B), 18,200 千円 (直接経費: 14,000 千円、間接経費: 4,200 千円), 2012-2014 年度.
2. H. Takahashi, “Research and Development of Information Cooperation Framework for Achieving Integrated Community Care System in the Disaster Area,” Grant-in-Aid for Young Scientists (B), ¥4,030,000 (Direct Cost: ¥3,100,000, Indirect Cost: ¥930,000), FY. 2013-2015.  
高橋 秀幸, “被災地の地域包括ケアシステムを実現する情報連携フレームワークの研究開発”, 若手研究(B), 4,030 千円 (直接経費: 3,100 千円、間接経費: 930 千円), 2013-2015 年度.
3. K. Sasai, “The Method of Inter-Microgrid Cooperation for Distributed Energy System based on Heterarchy,” Grant-in-Aid for Young Scientists (B), ¥3,900,000 (Direct Cost: ¥3,000,000, Indirect Cost: ¥900,000), FY. 2014-2015.  
笹井 一人, “ヘテラルキー型分散エネルギーシステムのためのマイクログリッド間協調方式”, 若手研究(B), 3,900 千円 (直接経費: 3,000 千円、間接経費: 900 千円), 2014-2015 年度.
4. T. Kinoshita, “Development of autonomous adaptive operation control mechanism for variable structure microgrid”, Grant-in-Aid for Scientific Research (C), ¥4,030,000 (Direct Cost: ¥3,100,000, Indirect Cost: ¥930,000), FY. 2016-2018.  
木下 哲男, “可変構造マイクログリッドのための自律適応型運用制御機構の開発”, 基盤研究(C), 4,030 千円 (直接経費: 3,100 千円、間接経費: 930 千円), 2016-2018 年度.

5. H. Takahashi, "Development of active care prevention support platform in super-aging society," Grant-in-Aid for Scientific Research (C), ¥4,550,000 (Direct Cost: ¥3,500,000, Indirect Cost: ¥1,050,000), FY. 2016-2018.  
高橋 秀幸, "超高齢化社会における能動的な介護予防支援プラットフォームの開発", 基盤研究(C), 4,550 千円 (直接経費: 3,500 千円、間接経費: 1,050 千円), 2016-2018 年度.
6. H. Takahashi, "Empirical Research for Evacuation Guidance Support System to Strengthen Regional Disaster Prevention Adapting to Natural Disasters," Grant-in-Aid for Scientific Research (B), ¥18,460,000 (Direct Cost: ¥14,200,000, Indirect Cost: ¥4,260,000), FY. 2018-2020.  
高橋 秀幸, "天災に適応し地域防災力を強化する避難行動支援システムに向けた実証的研究", 基盤研究(B), 18,460 千円 (直接経費: 14,200 千円、間接経費: 4,260 千円), 2018-2020 年度.
7. K. Sasai, "Behavior Model Reflecting Dynamical Values of Humans using Inverse Bayesian Inference," Grant-in-Aid for Scientific Research (C), ¥4,420,000 (Direct Cost: ¥3,400,000, Indirect Cost: ¥1,020,000), FY. 2018-2020.  
笹井 一人, "逆ベイズ推定を用いた人の多様な価値観を動的に反映する経済行動モデルの研究開発", 基盤研究(C), 4,420 千円 (直接経費: 3,400 千円、間接経費: 1,020 千円), 2018-2020 年度.

## (2) 受託研究費 / Other grants and subsidies

1. Japan Society for the Promotion of Science (JSPS) Bilateral Joint Research Projects/Seminars, ¥2,400,000, FY. 2012-2014.  
日本学術振興会・二国間交流事業・韓国との共同研究による共同研究, 2,400 千円, 2012-2014 年度.
2. Ministry of Internal Affairs and Communications supplementary budget, "Research and development of "Movable ICT-Units" for emergency transportation into disaster-affected areas and multi-unit connection", ¥12,399,000, FY. 2013.  
総務省 補正予算 災害時の確実な情報伝達を実現するための技術に関する研究開発, "被災地への緊急運搬及び複数接続運用が可能な移動式ICTユニットに関する研究開発", 12,399 千円, 2013 年度.
3. NICT Advanced Communication / Broadcast Research and Development Commissioned Research, "Research and development of platform technology for regional wireless mesh networks (177) - Research on Normal use of NerveNet and its field experiments," ¥4,160,000, FY. 2014-2016.  
NICT 高度通信・放送研究開発委託研究, "メッシュ型地域ネットワークのプラットフォーム技術の研究開発 (177) 副題 NerveNet の平時活用および実フィールド実証に関する研究", 4,160 千円, 2014-2016 年度
4. Japan Science and Technology Agency (JST) Cross-ministerial Strategic Innovation Promotion Program (SIP), ¥8,400,000, FY. 2014-2018.  
JST 戦略的イノベーション創造プログラム(SIP), 8,400 千円, 2014-2018 年度.
5. Contract research of Honda Research Institute Japan, ¥1,100,000, FY. 2014.  
ホンダリサーチインスティテュートジャパン受託研究, 1,100 千円, 2014 年度
6. Japan Society for the Promotion of Science (JSPS) Bilateral Joint Research Projects/Seminars, ¥2,400,000, FY. 2018.  
日本学術振興会・二国間交流事業・韓国との共同研究による共同研究, 1,176 千円, 2018 年度.

## 5.研究教育指導 / Research supervision

### (1)学位取得者リスト / List of bachelor's, master's and doctoral degree students supervised

#### 博士課程 / Doctral Degree

1. 魏 文鵬, Agent-based Design Method for Evolutional Systems (発展型システムにおけるエージェント指向設計手法に関する研究), 2013 年度.
2. 加藤 匠, Agent-Based Function Synthesis Framework for Human-Centered Systems (人間中心システムのエージェント指向機能合成フレームワークの研究), 2017 年度.
3. 谷村 優介, 自律的ネットワーク運用のための管理知識の利用手法に関する研究, 2017 年度.
4. 福谷 遼太, 教育・訓練環境における人間とシステムの協働促進手法に関する研究, 2018 年度.

#### 修士課程 / Master's degree

1. 板橋 佑介, 再利用性を考慮したネットワークデータの分析機構に関する研究, 2013 年度.
2. 唐鎌 行大, 論理ネットワークの推定に基づくネットワーク機器接続情報の導出に関する研究, 2013 年度.
3. 栗田 泰洋, マルチエージェントによる異種センサの自律的連携に関する研究, 2013 年度.
4. 古田土 翔大, 能動的情報資源による異種コンテンツの自律的連携機能に関する研究, 2014 年度.
5. 鈴木 皓也, 閲覧行動に基づく Web ページ推薦に関する研究, 2014 年度.
6. 谷村 優介, 知識型ネットワーク障害解決支援システムに関する研究, 2014 年度.
7. 中橋 修平, ネットワーク異常検知機能の自律的構成法に関する研究, 2014 年度.
8. ラナ シナパヤ, Multi-Agent Based Sound Source Localization for Aerial Swarm (飛翔体群のためのマルチエージェントによる音源同定), 2014 年度.
9. 千葉 遼, IoT エージェントのマルチタスクプランニング機能に関する研究, 2015 年度.
10. 蜂谷 雄介, 創造活動における能動的情報資源の想起支援機能に関する研究, 2015 年度.
11. 山田 良介, オンラインデータ解析のためエージェント指向スリム処理に関する研究, 2016 年度.
12. 久保田 恭守, 束縛型エージェント動作環境による安全なサービス個人化手法に関する研究, 2016 年度.
13. 門脇 伸明, 利用者の活動を考慮したネットワークの自律的構成法に関する研究, 2017 年度.
14. 志野 嘉紀, エッジコンピューティングにおける自律分散型タスクオフロードに関する研究, 2017 年度.
15. 河間 勇氣, 創造活動における能動的情報資源の獲得支援機能に関する研究, 2017 年度.
16. 高橋 香穂, 能動的な記憶断片を用いた想起支援に関する研究, 2017 年度.
17. 横山 真悟, 状況変化に適応するエージェント型 IoT デバイスの研究, 2017 年度.
18. 片山 健太, エージェント型 UAV 群を用いた沿岸部の避難誘導支援に関する研究, 2018 年度.
19. 土田 大樹, エージェント型 IoT デバイスの自律的連携による商業施設の顧客支援に関する研究, 2018 年度.
20. 星野 拓也, 対話機能を強化したエージェントと人間の協働によるネットワーク管理に関する研究, 2018 年度.

21. 松村 洋志, ネットワーク運用支援のためのエージェント型情報提供機構に関する研究, 2018 年度.
22. 和田 信也, エージェント型 IoT による生活支援システムの構成法に関する研究, 2018 年度.

#### 学士 / Bachelor's Degree

1. 千葉 遼, マルチエージェントによる異種デバイスの連携機能に関する研究, 2013 年度.
2. 蜂谷 雄介, 利用者向き情報提供のための異種コンテンツ連携機能に関する研究, 2013 年度.
3. 鈴木 遼雅, 移動エージェントを用いたセキュアなサービス個人化手法, 2014 年度.
4. 山田 直人, 能動的情報資源を用いたネットワーク観測データの収集・蓄積支援機構, 2014 年度.
5. 高橋 香穂, 過去の出来事を想起するための手がかり提示に関する研究, 2015 年度.
6. 横山 真悟, エージェント型 IoT デバイスの適応制御機能に関する研究, 2015 年度.
7. 松村 洋志, ストリーム処理のためのトラフィックデータ観測点のエージェント化に関する研究, 2015 年度.
8. 片山 健太, エージェント型 IoT デバイスの自律的連携による避難行動支援に関する研究, 2016 年度.
9. 星野 拓也, ネットワーク管理における人-エージェント協働支援機構に関する研究, 2016 年度.
10. 伊東 拓歩, 能動的情報資源による揭示情報共有のための情報集積機能の研究, 2017 年度.
11. 若張 直紀, エージェント型 IoT 環境における高齢者生活支援に関する研究, 2017 年度.
12. 小林 司弥, ネットワーク管理における初級管理者と管理システムの協働支援に関する研究, 2018 年度.
13. 佐藤 充祥, 初級管理者支援のためのネットワークデータ加工・表示機能に関する研究, 2018 年度.

## 6. 叙勲・受賞・表彰 / Honors, awards, and prizes

1. ネットワークソフトウェア優秀ポスター賞、唐鎌行大、北形元、笹井一人、木下哲男、“論理ネットワークの推定に基づくネットワーク機器設定の復元手法,” 2014 年電子情報通信学会総合大会通信講演論文集 2, BS-3-4, pp.S-154, Mar. 2014.
2. 情報通信学会モバイルネットワークとアプリケーション研究専門委員会(MoNA)2013 年度上期優秀発表賞、北形元、笹井一人、高橋秀幸、木下哲男、“大規模災害時のための不揮発性ネットワーキングの提案,” 信学技報, vol. 113, no. 168, MoNA2013-24, pp. 63-66, Aug. 2013.
3. 情報処理学会第 76 回全国大会学生奨励賞、蜂谷雄介、古田土翔大、高橋秀幸、笹井一人、北形元、木下哲男、“利用者指向情報提供システムにおける異種コンテンツの連携機構の設計,” 情報処理学会第 76 回全国大会講演論文集, 1V-9, pp.3-151-3-152, Mar. 2014.
4. 情報処理学会 CDS/MBL 研究会 第 2 回学生スマートフォンアプリコンテスト アイデア賞, Lana Sinapayen, “Power Pointer App,” 情報処理学会 CDS/MBL 研究会 第 2 回学生スマートフォンアプリコンテスト, Aug. 2014.
5. 電子情報通信学会通信ソサイエティ活動功労賞(平成 26 年), 北形 元, 2014.
6. Outstanding Student Paper Award, Yusuke Hachiya, Shota Kotato, Hideyuki Takahashi, Tetsuo Kinoshita “Cooperation Mechanism of Heterogeneous Contents in User-Oriented Information Delivery System,” Proc. of the 2014 IEEE 3rd Global Conference on Consumer Electronics (GCCE 2014), pp.24-25, Oct. 2014.
7. IEEE Sendai Section Student Awards 2014 (The Best Paper Prize), 加藤匠, 高橋秀幸, 木下哲男, “Hierarchical Multiagent Approach for Priority-based Energy Management in Microgrid,” 平成 26 年度電気関係学会東北支部連合大会, Dec. 2014.
8. 第 23 回 マルチメディア通信と分散処理ワークショップ (DPSWS2015) 優秀論文賞, 谷村優介, 笹井一人, 北形元, 木下哲男, “動的に変化するネットワークシステムのための知識型障害解決支援システム,” 第 23 回マルチメディア通信と分散処理ワークショップ(DPSWS2015)論文集, pp.156-163, Oct. 2015.
9. 情報処理学会第 78 回全国大会・学生奨励賞, 横山真悟, 加藤 匠, 高橋秀幸, 木下哲男, “エージェント型 IoT システムの自律適応制御手法,” 情報処理学会第 78 回全国大会講演論文集, Mar. 2016.
10. 情報処理学会第 78 回全国大会・学生奨励賞, 久保田 恭守, 北形 元, 高橋 秀幸, 笹井 一人, 木下 哲男, “サンドボックス環境を用いた移動型エージェントによる安全なサービス個人化手法,” 情報処理学会第 78 回全国大会講演論文集, Mar. 2016.
11. The Workshops of the 10th International Conference on Complex, Intelligent and Software Intensive System (CISIS-2016) Best Paper Award, Yoshitaka Kato, Takahiro Uchiya, Ichi Takumi, Tetsuo Kinoshita “Development of Operations Support Mechanism for Wide-Area Distributed Agent Repositories,” Proc. of the 10th International Conference on Complex, Intelligent, and Software Intensive Systems (CISIS-2016), July 2016.
12. 第 2 回東北大学附置研究所若手アンサンブルワークショップ 優秀ポスター賞, 加藤匠, 高橋 秀幸, 木下 哲男, “エージェント指向 IoT に基づく自律的サービス構成基盤,” July 2016 (受賞日 2016 年 7 月 12 日).
13. 情報処理学会(CDS 研究会・MBL 研究会)・第 4 回学生スマートフォンアプリコンテスト 最優秀賞, 門脇 伸明, 河間 勇気, 志野 嘉紀, 片山 健太, 星野 拓也, 福谷 遼太, 久保田 恭守, 山田 良介, 横山 真悟, 加藤 匠 (チーム名:伊達シェイク), 作品名:エクストリーム貧乏揺すり, Aug. 2016 (受賞日 2016 年 8 月 25 日).
14. 情報処理学会・第 24 回 マルチメディア通信と分散処理ワークショップ (DPSWS2016) 奨励賞, 久保田 恭守, 北形 元, 高橋 秀幸, 笹井 一人, 木下 哲男, “移動エージェントとサンドボックスによる 安全なサービス個人化手法,” Oct. 2016 (受賞日 2016 年 10 月 20 日).

15. 情報処理学会・第 18 回 コンシューマ・デバイス&システム研究発表会(第 100 回グループウェアとネットワークサービス・第 18 回コンシューマ・デバイス&システム・第 15 回デジタルコンテンツクリエイション合同研究発表会) 学生奨励賞, 高橋 香穂, 高橋 秀幸, 木下 哲男, “記憶想起支援のための能動的な体験記録提示システム,” Jan. 2017.
16. The Sixth International Conference On Advances in Computing, Control and Networking (ACCN 2017) BEST PAPER AWARD, Takumi Kato, Hideyuki Takahashi, Tetsuo Kinoshita, “Multiagent-based Autonomic Service Organization Scheme for the Internet of Things,” Proc. of the Sixth International Conference on Advances in Computing, Control and Networking (ACCN 2017), pp.109-113, Feb. 2017.
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