Takeshi Tsuchiya

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Professor

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Last updated:

Education

2009 Ph.D. - Graduate School of Information Production and Systems, Waseda University

2003 M.CS - Graduate School of Information Systems, Japan Advanced Institute of Science and Technology

2001 B.S. - Department of Applied Physics, Tokyo University of Science

Teaching and Research Interests

Data Analysis and Prediction System, Architecture of Web System and Internet, Applications of Internet, Distributed Computing, Cloud Computing, Blockchain

Academic Appointments

2022- Professor, Tokyo International University

2018-2022 Associate Professor, Suwa University of Science

2017-2018 Associate Professor, Tokyo University of Science, Suwa

2014-2017 Junior Associate Professor, Tokyo University of Science, Suwa

2010-2014 Assistant Professor, Tokyo University of Science, Suwa

2009-2010 Research Associate, Waseda University

2006-2009 Director of Cyber Network Inc.

Fellowships & Grants

2021-2023, 2017-2019, 2014-2016, JSPS Grants-in-Aid for Scientific Research (C)

2020 Grant for GMO Internet Foundation

2012-2013 Grant for Strategic Information and Communications R&D Promotion Program

2009-2010 Grant-in-Aid for Young Scientists (Start-up)

Selected Publications/Conference Papers

"Research on Selective Combination of Distributed Machine Learning Models," SN COMPUT. SCI. 3, 438. Aug. 2022. (coauthored with Mochizuki, R., Hirose, H., Yamada. T.)

"Fog Computing Enabled Hydroponic Farming Systems," Journal of Mobile Multimedia Vol.18 No. 4, pp. 981-1008, Mar. 2022. (coauthored with Quang Tran Minh, Vy Nguyen Tran Gia, Sang Nguyen Tran, Phat Nguyen Huu)

"Mobile Crowd-Sourced Data Fusion and Urban Traffic Estimation," Journal of Mobile Multimedia Vol. 18 No. 4, pp. 1035-1062, Mar. 2022. (coauthored with Quang Tran Minh, Phat Nguyen Huu)

"Selective Combination and Management of Distributed Machine Learning Models," Int'l Conf. on Future Data and Security Engineering (FDSE 2021), Springer Lecture Notes in Computer Science, vol. 13076, pp. 113–124, Nov. 2021, Vietnam. (coauthored with Ryuichi Mochizuki, Hiroo Hirose, Tetsuyasu Yamada, Keiichi Koyanagi, Quang Tran Minh, Tran,)

"Research on a Communication Platform Coordinating Web Services and Smart Speakers on the Application Layer," Springer Nature COMPUTER SCIENCE 2, 306, July, 2021. (coauthored with Mochizuki, R., Hirose, H. Yamada, T., Imamura, N., Yokouchi, N., Quang Tran Minh)

"Sightseeing Hot Spots Analysis by Using SNS's Photos and Taking Location Information Based on Image-to-Tag Method," International Journal of Machine Learning and Computing, Vol. 10-5, pp. 624-629, Oct.5, 2020. (coauthored with Kohjiro

Hashimoto, Tadashi Miyosawa, Mai Miyabe, Takeshi Ozaki, Hiroo Hirose)

"Integrating Web Services in Smart Devices Using Information Platform Based on Fog Computing Model," Int'l Conf. on Future Data and Security Engineering (FDSE 2020), Springer Lecture Notes in Computer Science, Vol. 12466, pp. 111–123, Nov. 2020, Vietnam. (coauthored with Ryuichi Mochizuki, Hiroo Hirose, Tetsuyasu Yamada, Keiichi Koyanagi, Quang Tran Minh, Tran)

"Distributed Data Platform for Machine Learning Using the Fog Computing Model," SN Computer Science, SCI. 1, 164 (2020). (coauthored with Mochizuki, R., Hirose, H., Yamada, T., Koyanagi, K., Quang Tran Minh)

"Designed Features for Improving Openness, Scalability and Programmability in the Fog Computing-Based IoT Systems," SN Computer Science SCI. 1, 194, 2020. (coauthored with Quang Minh Tran, Phat Huu Nguyen, Michel Toulouse)

"Detection of Contributing Object to Driving Operations based on Hidden Markov Model," International Journal of Advanced Robotic Systems, pp. 1-15, 2019. (coauthored with Kohjiro Hashimoto, Tetsuyasu Yamada, Kae Doki, Yuki Funabora, Shinji Doki)

"Openness in Fog Computing for the Internet of Things," Int'l Conf. on Future Data and Security Engineering (FDSE 2019), Springer Lecture Notes in Computer Science, Vol. 11814, pp. 343–357, Nov. 2019, Vietnam. (coauthored with Quang Tran Minh, Phat Nguyen Huu, Michel Toulouse)

"Sightseeing Hot Spots Analysis by Using SNS's Photos and Taking Location Information Based on Image-to-Tag Method," Proceedings of the 8th International Conference on Knowledge Discovery, DY041, pp.1-6, Nov. 2019. (coauthored with Kohjiro Hashimoto, Tadashi Miyosawa, Mai Miyabe, Takeshi Ozaki, Hiroo Hirose)

"Predicting User Interests Based on Their Latest Web Activities," Proc. of 13th Int. Conf. on Mobile Ubiquitous Computing, Systems, Services and Technologies (UBICOMM), Sep. 2019, Portugal. (coauthored with Hiroo Hirose, Tetsuyasu Yamada, Hirokazu Yoshinaga, Keiichi Koyanagi)

"Quantification of Contributing Degree to Braking Operation of Driver Based on the Hidden Markov Model," Proceedings of the 28th IEEE International Symposium on Industrial Electronics, pp. 1711-1716. June 2019. (coauthored with Kohjiro Hashimoto, Tadashi Miyosawa, Tetsuyasu Yamada, Kae Doki, Shinji Doki)

"Study on a Selection Method of Objects Contribute to Driver Operation Based on a Statistical Driving Behavior Model," Proceedings of the 2019 IEEE International Conference on Industrial Technology, pp. 909-914. Feb. 2019. (coauthored with Kohjiro Hashimoto, Tetsuyasu Yamada)

"Research on Improvement of Information Platform for Local Tourism by Paragraph Vector," Computational Intelligence and Mathematics for Tackling Complex Problems, Studies in Computational Intelligence, Vol. 819, pp. 115-122, Springer International Publishing, 2019. (coauthored with Hiroo Hirose, Tadashi Miyosawa, Tetsuyasu Yamada, Hiroaki Sawano, Keiichi Koyanagi)

"Analysis of Diverse Tourist Information Distributed across the Internet," Proc. of Int. Conf. on Future Data and Security Engineering, Springer Lecture Notes in Computer Science, Vol. 11251, pp. 413-422, Ho Chi Min city Vietnam, Nov. 2018. (coauthored with Hiroo Hirose, Tadashi Miyosawa, Tetsuyasu Yamada, Hiroaki Sawano, Keiichi Koyanagi)

"Improving Network Throughput on Application by Weighting Subflows of Muti-Path TCP Adapted to Conditions," Proceedings of International Conference on Intelligent Computing and Applications, Jan. 2018 (coauthored with Hiroo Hirose, Tadashi Miyosawa, Tetsuyasu Yamada, Hiroaki Sawano, Keiichi Koyanagi)