Naoto Ohsaka

Curriculum Vitae
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Personal and contact information

Name:	Naoto Ohsaka
Citizenship:	Japan
Current position:	Ph.D. Student,
	Department of Computer Science,
	Graduate School of Information Science and Technology,
	the University of Tokyo
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Education

March 2015	Master of Information Science and Technology, Department of Computer Science, Graduate School of Information Science and Technology, the University of Tokyo
	Thesis: Estimating and Maximizing the Spread of Influence in Social Networks: Pruned Monte-Carlo Simulations and Fully-Dynamic Indices
	Supervisor: Professor H. Imai
March 2013	Bachelor of Engineering, Department of Computer Science, the University of Electro-Communications
	Thesis: Study on Improving the Performance of a Streaming Algorithm for the k-means Problem
	Supervisor: Professor M. Muramatsu
March 2011	Graduated from Tokyo National College of Technology

Professional experience

April 2013–March 2016   Research assistant of the Complex Network and Map Graph
                        Group, JST, ERATO, Kawarabayashi Large Graph Project

Referee

Journal reviewer, IEICE Transactions on Information and Systems, 2016

Honors and awards

November 2012   3rd Place (with Izuru Matsuura and Masafumi Yabu), ACM
                    International Collegiate Programming Contest Asia Regional
                    Contest 2012 in Tokyo, Tokyo, Japan

July 2013   14th Place (with Izuru Matsuura and Masafumi Yabu), ACM
                    International Collegiate Programming Contest World Finals 2013,
                    St. Petersburg, Russia

March 2014   Excellent Paper Award (with Takuya Akiba, Yuichi Yoshida, and
                    Ken-ichi Kawarabayashi), the 6th Forum on Data Engineering and
                    Information Management, Hyogo, Japan

March 2014   Student Presentation Award, the 6th Forum on Data Engineering
                    and Information Management, Hyogo, Japan

May 2015   Poster presentation award, the 29th Annual Conference of the
                    Japanese Society for Artificial Intelligence, Hokkaido, Japan

Publications

Proceedings of Refereed Conferences

1. <u>Naoto Ohsaka</u>, Yutaro Yamaguchi, Naonori Kakimura, and Ken-ichi Kawarabayashi.
    Maximizing Time-Decaying Influence in Social Networks. *Proceedings of the 15th
    European Conference on Machine Learning and Principles and Practice of
    Knowledge Discovery in Databases (ECML PKDD)*, pp. 132–147, 2016.

2. <u>Naoto Ohsaka</u>, Takuya Akiba, Yuichi Yoshida, and Ken-ichi Kawarabayashi. Dynamic
    Influence Analysis in Evolving Networks. *Proceedings of the VLDB Endowment,
    (PVLDB)*, 9(12), pp. 1077–1088, 2016.

3. <u>Naoto Ohsaka</u> and Yuichi Yoshida. Monotone *k*-Submodular Function Maximization with Size Constraints. *Proceedings of the 29th Annual Conference on Neural Information Processing Systems (NIPS)*, pp. 694–702, 2015.

4. <u>Naoto Ohsaka</u>, Takanori Maehara, and Ken-ichi Kawarabayashi. Efficient PageRank Tracking in Evolving Networks. *Proceedings of the 21st ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (KDD)*, pp. 875–884, 2015.

5. <u>Naoto Ohsaka</u>, Takuya Akiba, Yuichi Yoshida, and Ken-ichi Kawarabayashi. Fast and Accurate Influence Maximization on Large Networks with Pruned Monte-Carlo Simulations. *Proceedings of the 28th AAAI Conference on Artificial Intelligence (AAAI)*, pp. 138–144, 2014.

6. <u>Naoto Ohsaka</u>, Daisuke Kitakoshi, and Masato Suzuki. A Reinforcement Learning Method to Improve the Sweeping Efficiency for an Agent. *Proceedings of the 2011 IEEE International Conference on Granular Computing (GrC)*, pp. 515–520, 2011.

Presentations

September 2016	Oral and poster presentation of Publication 1 in Riva del Garda, Italy
September 2016	Oral and poster presentation of Publication 2 in New Delhi, India
December 2015	Poster presentation of Publication 3 in Montréal, Canada
August 2015	Oral and poster presentation of Publication 4 in Sydney, Australia
July 2014	Oral and poster presentation of Publication 5 in Québec, Canada
November 2011	Oral presentation of Publication 6 in Kaohsiung, Taiwan

Research interests

Algorithms for real-world large graphs, Network diffusion, Submodular function optimization, Uncertain graphs

Skills

Programming languages (C/C++, Java, Ruby)