

Jan., 12, 2016.

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Research Scientist, National Institute of Advanced Industrial Science and
Technology (AIST), Japan

Contact Information _____

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Research Interests _____

- Computer Vision & Pattern Recognition
- Video Understanding (Action Recognition, Action Prediction, Event Recognition)
- Image Recognition (Fashion Recognition, Change Detection)

Professional Experiences _____

April 2016 – Present

Research Scientist, National Institute of Advanced Industrial Science
and Technology (AIST), Japan

April 2015 – March 2016

Postdoctoral Fellow, National Institute of Advanced Industrial Science
and Technology (AIST), Japan

April 2014 – March 2015

Postdoctoral Fellow, The University of Tokyo, Japan

July 2013 – September 2013, September 2014 – November 2014

Visiting Researcher, Technische Universitat Munchen (TUM), Ger-
many

Supervisor : Prof. Nassir Navab, Dr. Slobodan Ilic

April 2013 – March 2015

Reserch Fellow, Japan Society for the Promotion of Science (JSPS),
Japan

August 2011 – February 2012

Visiting Scholar, Center for Research in Intelligent Systems, Univer-
sity of California, Riverside, United States

Supervisor : Prof. Bir Bhanu

Education

April 2011 – March 2014

Ph.D. candidate, Graduate School of Science and Technology, Keio University, Japan
Supervisor : Prof. Yoshimitsu Aoki

April 2009 – March 2011

Master course, Graduate School of Science and Technology, Keio University, Japan
Supervisor : Prof. Yoshimitsu Aoki

April 2005 – March 2009

Bachelor course, Department of Information and Engineering, Shibaura Institute of Technology, Japan

April 2002 – March 2005

Midorioka High School, Japan

Selected Publications

1. Kensho Hara, Hirokatsu Kataoka, Yutaka Satoh, “Can Spatiotemporal 3D CNNs Retrace the History of 2D CNNs and ImageNet?”, arXiv pre-print, 1711.09577, Nov. 2017.
2. Fangge Chen, Hirokatsu Kataoka, Yutaka Satoh, “Text Detection in Traffic Informatory Signs Using Synthetic Data”, International Conference on Document Analysis and Recognition (ICDAR 2017), Nov. 2017.
3. Kensho Hara, Hirokatsu Kataoka, Yutaka Satoh, “Learning Spatio-Temporal Features with 3D Residual Networks for Action Recognition”, ICCV 2017 Workshop on ChaLearn Looking at People, Oct. 2017.
4. Kaori Abe, Teppei Suzuki, Shunya Ueta, Akio Nakamura, Yutaka Satoh, Hirokatsu Kataoka, “Changing Fashion Cultures”, in arXiv 1703.07920, (MIRU2017), Mar. 2017. (**Oral, MIRU2017 Best Student Paper**)
5. Yun He, Soma Shirakabe, Yutaka Satoh, Hirokatsu Kataoka, “Human Action Recognition without Human”, ECCV 2016 Workshop on Brave

New Ideas for Motion Representations in Videos (BNMW), Oct. 2016.
(Oral, Best Paper)

6. Hirokatsu Kataoka, Yun He, Soma Shirakabe, Yutaka Satoh, “Motion Representation with Acceleration Images”, ECCV 2016 Workshop on Brave New Ideas for Motion Representations in Videos (BNMW), Oct. 2016.
7. Hirokatsu Kataoka, Yudai Miyashita, Masaki Hayashi, Kenji Iwata, Yutaka Satoh, “Recognition of Transitional Action for Short-Term Action Prediction using Discriminative Temporal CNN Feature”, British Machine Vision Conference (BMVC), Sep. 2016. **(Acceptance rate: 39.4%)**
8. Hirokatsu Kataoka, Yudai Miyashita, Tomoaki Yamabe, Soma Shirakabe, Shin’ichi Sato, Hironori Hoshino, Ryo Kato, Kaori Abe, Takaaki Imanari, Naomichi Kobayashi, Shinichiro Morita, Akio Nakamura, “cvpaper.challenge in 2015 - A review of CVPR2015 and DeepSurvey”, arXiv pre-print 1605.08247, May. 2016. **(Completed to read ALL of the CVPR 2015 papers!)**
9. Hirokatsu Kataoka, Masaki Hayashi, Kenji Iwata, Yutaka Satoh, Yoshimitsu Aoki, Slobodan Ilic, “Dominant Codewords Selection with Topic Model for Action Recognition”, IEEE CVPR 2016 Workshop on ChaLearn Looking at People, Jul. 2016.
10. Hirokatsu Kataoka, Soma Shirakabe, Yudai Miyashita, Akio Nakamura, Kenji Iwata, Yutaka Satoh, “Semantic Change Detection with Hypermaps”, arXiv pre-print arXiv:1604.07513, Apr. 2016.
11. Hirokatsu Kataoka, Yoshimitsu Aoki, Yutaka Satoh, Shoko Oikawa, Yasuhiro Matsui, “Fine-grained Walking Activity Recognition via Driving Recorder Dataset”, IEEE Intelligent Transportation Systems Conference (ITSC), Sep. 2015.
12. Masamichi Shimosaka, Nishi Kentaro, Junichi Sato, Hirokatsu Kataoka, “Predicting Driving Behavior Using Inverse Reinforcement Learning with Multiple Reward Functions towards Environmental Diversity”, IEEE Intelligent Vehicles Symposium (IV), May 2015. **(Acceptance rate (oral): 6.6%)**
13. Hirokatsu Kataoka, Kiyoshi Hashimoto, Kenji Iwata, Yutaka Satoh, Nassir Navab, Slobodan Ilic, Yoshimitsu Aoki, “Extended Co-occurrence HOG with Dense Trajectories for Fine-grained Activity Recognition”,

Asian Conference on Computer Vision (ACCV), 2014. (**Acceptance rate: 27.8%**)

14. Hirokatsu Kataoka, Kimimasa Tamura, Kenji Iwata, Yutaka Satoh, Yasuhiro Matsui, “Extended Feature Descriptor and Vehicle Motion Model with Tracking-by-detection for Pedestrian Active Safety”, IE-ICE Trans. on Information and Systems, Vol.97, No.2, pp.296–304, 2014.

Awards

1. MIRU Best Student Paper, MIRU 2017
2. Best Student Paper, ViEW 2016, Dec. 2016.
3. Best Paper, ECCV 2016 workshop on brave new ideas for motion representation in videos, Oct 2016.
4. Fujiwara Award, Faculty of Science and Technology at Keio University, Mar 2014.
5. IEEJ Best Journal Award 2012, IEEJ Transactions on Electrical and Electronic Engineering, Sep 2013.
6. IEEE IECON2012 Best Presentation Award, IEEE IECON2012, Oct 2012.
7. Odawara Award, ViEW2011, Dec 2011.
8. Best Master Course Student Award of School of Integrated Design Engineering in Master Course, Mar 2011.
9. Best Paper Award of SICE pattern analysis symposium, Dec 2010.

Invited talks

1. Nagoya CV · PRML, Dec. 2017.
2. teamLab, Dec. 2017.
3. Tokyo Denki Univ., Nov. 2017.
4. Waseda Univ., Sep. 2017.
5. Chukyo Univ., Feb. 2017.

6. Keio Univ., Jan. 2017.
7. STAIR Lab., Jan. 2017.
8. TUM & AIST joint seminar, Oct. 2016.
9. IAIP, Jul. 2016.
10. Pattern Recognition and Media Understanding (PRMU), Dec. 2015.
11. SSII2015, Jun. 2015.
12. Max Planck Institute for Infomatics (MPII), Oct. 2014.
13. Tokyo University, Jun. 2012.