

Yumin Suh (서유민)

Researcher at NEC Laboratories America

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RESEARCH INTERESTS I have broad interest in Computer Vision and Machine Learning. Especially,
- Deep metric learning & image retrieval
- Domain adaptation/generalization
- Visual representation learning with imperfect supervision

EDUCATION [Seoul National University](#), Seoul, Korea

Ph.D., Electrical and Computer Engineering Mar 2014 – Feb 2019
Advisor: [Prof. Kyoung Mu Lee](#)

M.S., Electrical Engineering and Computer Science Mar 2011 – Feb 2013
Thesis: Graph Matching via Sequential Monte Carlo
Advisor: [Prof. Kyoung Mu Lee](#)

B.S., Electrical Engineering Mar 2007 – Feb 2011
Thesis: CMOS Interface Circuit Design for Silicon Photonics Device
Advisor: Prof. Deog-Kyoon Jeong

PUBLICATIONS Seonguk Seo, **Yumin Suh**, Dongwan Kim, Jongwoo Han, and Bohyung Han “Learning to Optimize Domain Specific Normalization for Domain Generalization”, European Conference on Computer Vision (**ECCV**), 2020.

Yumin Suh, Bohyung Han, Wonsik Kim, and Kyoung Mu Lee, “Stochastic Class-based Hard Example Mining for Deep Metric Learning”, Conference on Computer Vision and Pattern Recognition (**CVPR**), 2019.

Yumin Suh, Jingdong Wang, Siyu Tang, Tao Mei, and Kyoung Mu Lee, “Part-Aligned Bilinear Representations for Person Re-identification”, European Conference on Computer Vision (**ECCV**), 2018.

Yumin Suh and Kyoung Mu Lee, “Appearance Dependent Inter-Part Relationship for Human Pose Estimation”, Asia Pacific Signal and Information Processing Association Conference (APSIPA), 2016.

Kamil Adamczewski, **Yumin Suh**, Kyoung Mu Lee, “Discrete Tabu Search for Graph Matching”, International Conference on Computer Vision (**ICCV**), 2015.

Yumin Suh, Kamil Adamczewski, Kyoung Mu Lee, “Subgraph Matching Using Compactness Prior For Robust Feature Correspondence”, Conference on Computer Vision and Pattern Recognition (**CVPR**), 2015.

Yumin Suh, Minsu Cho, and Kyoung Mu Lee, “Graph Matching via Sequential Monte Carlo”, European Conference on Computer Vision (**ECCV**), 2012.

Minju Kim, **Yumin Suh**, Daeseob Lim, Issac Rhim, Kyoung-Whan Choi, and Sang-

Hun Lee, “Roles of Time Hazard in Perceptual Decision Making under High Time Pressure”, *i-Perception* 2(4), 2011

WORKSHOPS

Dongwan Kim, Geeho Kim, Seonguk Seo, **Yumin Suh**, Bohyung Han, Taeho Lee, Jongwoo Han, and Hyejeong Jeon “Cross-Modal Prediction Consistency based Self-Training for Unsupervised Domain Adaptation”, 2019.

(3rd Place in VisDA-2019 Challenge)

Seonguk Seo*, **Yumin Suh***, Woong-Gi Chang, Tackgeun You, Suha Kwak, Taeho Lee, and Bohyung Han, “Domainwise Batch Normalization for Unsupervised Domain Adaptation”, International Conference on Machine Learning (**ICML**) Workshop on Understanding and Improving Generalization in Deep Learning, 2019. (* indicates equal contribution)

Jungmin Lee, **Yumin Suh**, and Kyoung Mu Lee, “Energy Formulation for Effective Subgraph matching”, Workshop on Image Processing and Image Understanding, 2013.

PROJECTS

Gyeongsik Moon, Ju Yong Chang, **Yumin Suh**, and Kyoung Mu Lee, “Holistic Planimetric prediction to Local Volumetric prediction for 3D Human Pose Estimation”, [arXiv:1706.04758](https://arxiv.org/abs/1706.04758).

EXPERIENCE

Postdoctoral Researcher

- [Computer Vision Lab.](#), Seoul National University Mar 2019 – Nov 2019
Working with [Prof. Bohyung Han](#) and [Prof. Kyoung Mu Lee](#)

Intern

- Microsoft Research Asia (MSRA), Beijing, China Sep 2016 – Jun 2017
Mentors: [Dr. Tao Mei](#) and [Dr. Jingdong Wang](#)
- Inria WILLOW group, Paris, France Dec 2014 – May 2015
Mentors: [Prof. Jean Ponce](#) and [Prof. Minsu Cho](#)
- Samsung Mobile Display Jun 2009

Teaching Assistant

- Topics in Control and Automation - Selected Topics in Computer Vision, Dept. of ECE, Seoul National University Sep 2017 – Dec 2017
- Electrical Electronic Engineering Design and Lab - Introduction to computer vision, Dept. of EECS, Seoul National University Sep 2012 – Dec 2012

Research Assistant

- Participated in the project “Joint Modeling of Human Pose and Action in Video”, ASRI, Seoul National University Mar 2013 – Feb 2014
- Participated in the project “Roles of time hazard in perceptual decision making under high time pressure”, Vision Neuroimaging Lab., Dept. of Brain and Cognitive Science, Seoul National University Sep 2010 – Dec 2010

HONORS

- *3rd Place Award, VisDA-2019* 2019
Visual Domain Adaptation Challenge, TASK-CV Workshop in ICCV 2019
with Dongwan Kim, Geeho Kim, Seonguk Seo, Bohyung Han, Taeho Lee, Jongwoo Han, Hyejeong Jeon
- *Doctoral Colloquium, KCCV 2019* 2019
- *Doctoral Consortium, CVPR 2019* 2019
- *3rd Place Award, SFMI Machine Learning Challenge 2017* 2017
Challenge on the road sign letter recognition from road view images
with Jihong Kang and Sungyong Baik
Samsung Fire & Marine Insurance, Korea
- *MSRA Fellowship Nomination Award* 2016
Microsoft Research Asia, Beijing, China
- *Graduated with honors (Summa cum laude)* Feb 2011
Department of Electrical Engineering, Seoul National University

SCHOLARSHIPS

- *Graduate Scholarship* Sep 2011 - Aug 2017
Korea Foundation for Advanced Studies (KFAS), Korea
- *National Presidential Science Scholarship* 2007 – 2011
Korean Government
- *Samsung JFL scholarship* 2005

ACADEMIC ACTIVITIES

- *Conference Reviewer*
AAAI, CVPR, ICML, ECCV, ICPR, WACV, ACCV 2020
CVPR, ICCV 2019
ACM MM 2017
- *Journal Reviewer: TPAMI, TIP, TMM, CVIU, MMSJ, AOAS, TCSVT*
- *Student volunteer of ACCV 2012 and ACM MM 2018*

SKILLS

C, C++, MATLAB, python, lua, L^AT_EX