Seonghyeon Nam

Ph.D., Computer Science

Toronto, Ontario, Canada
shnnam@eecs.yorku.ca
Website : http://snam.ml
LinkedIn: https://www.linkedin.com/in/seonghyeonnam
GoogleScholar: https://scholar.google.co.kr/citations?user=Gnly5EQAAAAJ
Github : https://github.com/woozzu
+1 437-361-9729

Research Interests

Computer Vision, Machine Learning
computational photography, deep generative models, learning with minimal supervision

Experience

Samsung AI Center, Toronto, Ontario, Canada
Research Intern *Aug' 21 - Present*

York University, Toronto, Ontario, Canada
Postdoctoral Fellow *Jan' 21 - Present*
- Superviser: Prof. Michael S. Brown
- Worked on coordinate-based neural representations for multi-image fusion and layer separation.

Snap Inc., Los Angeles, California, United States
Research Intern *May' 18 - Aug' 18*
- Advisor: Dr. Chongyang Ma
- Worked on the problem of synthesizing time-lapse videos from a single image.
- Developed a deep generative model for hallucinating outdoor illumination without reference.

Yonsei University, Seoul, South Korea
Research Assistant *Mar' 14 - Aug' 20*
- Advisor: Prof. Seon Joo Kim

Education

Yonsei University, Seoul, South Korea
Ph.D., Computer Science, *Mar' 14 - Aug' 20*
Advisor: Prof. Seon Joo Kim
GPA: 4.10/4.3

Yonsei University, Seoul, South Korea
B.S., Computer Science, *Mar' 09 - Jeb' 14*
GPA: 3.69/4.3

Publications

D. Kim, J. W. Kim, **S. Nam**, D. Lee, Y. Lee, N. Kang, H.-E. Lee, B. Yoo, J.-J. Han, and S. J. Kim. Large Scale Multi-Illuminant (LSMI) Dataset for Developing White Balance Algorithm under Mixed Illumination. Accepted to *the IEEE International Conference on Computer Vision* (**ICCV**), 2021.

Y. H. Kim, **S. Nam**, and S. J. Kim. Temporally Smooth Online Action Detection using Cycle-consistent Future Anticipation. *Pattern Recognition* (**PR**) 116 (2021): 107954.

S. Jeon, **S. Nam**, S. W. Oh, and S. J. Kim. Cross-Identity Motion Transfer for Arbitrary Objects through Pose-Attentive Video Reassembling. In *Proceedings of the European Conference on Computer Vision* (**ECCV**), 2020.

Y. Kim, **S. Nam**, I. Cho, and S. J. Kim. Unsupervised Keypoint Learning for Guiding Class-Conditional Video Prediction. In *Advances in Neural Information Processing Systems* (**NeurIPS**), 2019.

S. Nam, C. Ma, M. Chai, W. Brendel, N. Xu, and S. J. Kim. End-to-End Time-Lapse Video Synthesis from a Single Outdoor Image. In *Proceedings of the IEEE Conference on Computer*

Vision and Pattern Recognition (**CVPR**), 2019.

S. Nam, Y. Kim, and S. J. Kim. Text-Adaptive Generative Adversarial Networks: Manipulating Images with Natural Language. In *Advances in Neural Information Processing Systems* (**NeurIPS**), 2018 (**Spotlight**).

S. Nam and S. J. Kim. Modelling the Scene Dependent Imaging in Cameras with a Deep Neural Network. In *Proceedings of the IEEE International Conference on Computer Vision* (**ICCV**), 2017.

S. Nam*[1], Y. Hwang*, Y. Matsushita, and S. J. Kim. A Holistic Approach to Cross-Channel Image Noise Modeling and its Application to Image Denoising. In *Proceedings of the IEEE Conference on Computer Vision and Pattern Recognition* (**CVPR**), 2016 (**Spotlight**).

Patent

Registration

Method and Apparatus for Generating Video Based on Keypoints. **Korea Patent No. 10-2231391**

Apparatus and method for generating manipulated image based on natural language and system using the same. **Korea Patent No. 10-2192015**

Method and apparatus for image adjustment based on semantics-aware. **Korea Patent No. 10-2192016**

Application

Method for Enhancing Motion Transfer using Multiple Sources and Cycle Training **Korea Patent No. 10-2019-0175557**

Academic Service

Conference Reviewer

IEEE Conference on Computer Vision and Pattern Recognition (**CVPR**)	*2018 - Present*
IEEE International Conference on Computer Vision (**ICCV**)	*2019 - Present*
European Conference on Computer Vision (**ECCV**)	*2020*
Advances in Neural Information Processing Systems (**NeurIPS**)	*2020 - Present*
International Conference on Learning Representations (**ICLR**)	*2021*
AAAI Conference on Artificial Intelligence (**AAAI**)	*2020*
Asian Conference on Computer Vision (**ACCV**)	*2018*
Winter Conference on Applications of Computer Vision (**WACV**)	*2017, 2018*

Journal Reviewer

IEEE Transactions on Image Processing (**TIP**)

Computer Vision and Image Understanding (**CVIU**)

Talks

Doctoral Colloquium, Korean Conference on Computer Vision (**KCCV**)	*2019*
Spotlight, Conference on Neural Information Processing Systems (**NeurIPS**)	*2018*
Tech Talk, NAVER Corp.	*2017, 2018*
Spotlight, IEEE Conference on Computer Vision and Pattern Recognition (**CVPR**)	*2016*

Honors & Awards

VISTA Postdoctoral Fellowship, York University	*2021*
Postdoctoral Fellowship, National Research Foundation of Korea (NRF)	*2021*
NAVER Fellowship, NAVER Corp.	*2017*
Excellence Award, Dept. of Computer Science, Yonsei University	*2016*
Bronze Prize, 22nd Samsung HumanTech Paper Award	*2016*
Global Ph.D. Fellowship, National Research Foundation of Korea (NRF)	*2015 - 2019*

[1] Equal contribution

Skills

Languages
Python, **C/C++**, **Matlab**, Java, C#, HTML, PHP

Deep Learning Libraries
PyTorch, TensorFlow, Caffe, Keras

ETC
OpenCV, Android SDK

References

References are provided upon request.