Younghyun Jo

Contact

Computational Intelligence and Photography Lab

INFORMATION Dept. of

Dept. of Computer Science E-mail: yh.jo@yonsei.ac.kr Yonsei University $Tel: +82 \ 10-9609-7097$

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RESEARCH

Computational Photography / Computer Vision / Machine Learning

INTERESTS Image/Video super-resolution, video generation/synthesis, and deep learning for computer vision.

EDUCATION

Yonsei University, Seoul, Korea

M.S./Ph.D. Student, Computer Science

Sep 2015 - Present

• Advisor: Seon Joo Kim

• GPA: 4.17/4.3

Yonsei University, Seoul, Korea

B.S., Computer Science and Engineering

Mar 2009 - Aug 2015

• GPA: 3.72/4.3

WORK Experience Yonsei University, Seoul, Korea

Sep 2015 - Current

(Research Assistant)

• Deep learning based image/video super-resolution.

Sep 2016 - Current

• Light field image analysis for super-resolution and depth estimation.

Sep 2015 - Aug 2016

Mintech, Seoul, Korea (Android Developer Intern)

Jan 2013 - Feb 2013

TEACHING EXPERIENCE Samsung Electronics, Gyeonggi, Korea

(Teaching Assistant)

• Deep Learning (20 hours of lecture and lab)

Aug 2017

Yonsei University, Seoul, Korea

(Teaching Assistant)

• Computer Programming (Undergrad).

Spring 2016

PUBLICATIONS

Younghyun Jo, Sejong Yang, Seon Joo Kim, "SRFlow-DA: Super-Resolution Using Normalizing Flow with Deep Convolutional Block", In Proc. of the IEEE/CVF Conference on Computer Vision and Pattern Recognition Workshops (CVPR Workshops) 2021.

Younghyun Jo, Seoung Wug Oh, Peter Vajda, Seon Joo Kim, "Tackling the Ill-Posedness of Super-Resolution through Adaptive Target Generation", In Proc. of the IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR), 2021.

Younghyun Jo, Seon Joo Kim, "Practical Single-Image Super-Resolution Using Look-Up Table", In Proc. of the IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR), 2021.

Jaeyeon Kang, **Younghyun Jo**, Seoung Wug Oh, Peter Vajda, Seon Joo Kim, "Deep Space-Time Video Upsampling Networks", In Proc. of the European Conference on Computer Vision (**ECCV**) 2020.

Younghyun Jo, Sejong Yang, Seon Joo Kim, "Investigating loss functions for extreme super-resolution", In Proc. of the IEEE/CVF Conference on Computer Vision and Pattern Recognition Workshops (CVPR Workshops) 2020.

Younghyun Jo, Seoung Wug Oh, Jaeyeon Kang, Seon Joo Kim, "Deep Video Super-Resolution Network Using Dynamic Upsampling Filters Without Explicit Motion Compensation", In Proc. of the IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR), 2018.

Patent

Pending

- Apparatus for training super-resolution network and method of the same (Korea).
- Apparatus for super-resolution image processing using look-up table and method of the same (Korea).

ACADEMIC SERVICE

Conference Reviewer

• IEEE/CVF International Conference on Computer Vision (ICCV)	2021
• IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR)	2021
Asian Conference on Computer Vision (ACCV)	2018

Journal Reviewer

- International Journal of Computer Vision (IJCV)
- Journal of Electronic Imaging (JEI)

Honors & Scholarships

New Trends in Image Restoration and Enhancement (NTIRE) Workshop, in conjunction with CVPR

•	Runner-Up Award, NTIRE 2021 Challenge on Learning the Super-Resolution Space.	2021
•	2nd Place Award, NTIRE 2020 Challenge on Perceptual Extreme Super-Resolution.	2020

Naver Corporation, Gyeonggi, Korea

• Naver Ph.D. Fellowship.

 ${\bf 2018}$

Samsung Electronics, Gyeonggi, Korea

• Bronze prize, 24th Samsung Humantech Paper Award.

2018

Yonsei University, Seoul, Korea

• Graduate Scholarship for Excellent Students.

Sep 2015 - Aug 2017

SKILLS

Programming Languages

• Python, Matlab, C/C++, Java

Tools

• Pytorch, Tensorflow, OpenCV, Android