Younghyun Jo

Contact

Computational Intelligence and Photography Lab

Information

Seoul, Korea Website: https://yhjo09.github.io

RESEARCH INTERESTS Computer Vision / Computational Photography / Machine Learning

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 2017 - Current

• Deep learning based image super-resolution.

Sep 2016 - Aug 2017

• 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

Samsung Electronics, Gyeonggi, Korea

Experience (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, 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 Conference on Computer Vision and Pattern Recognition (CVPR), 2018.

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 (CVPRW) 2020.

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.

ACADEMIC SERVICE Conference Reviewer

• Asian Conference on Computer Vision (ACCV)

2018

Journal Reviewer

• Journal of Electronic Imaging (JEI)

Honors & Scholarships

Naver Corporation, Gyeonggi, Korea

• Naver Ph.D. fellowship.

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

PROJECTS

Institute of Information & Communications Technology Planning & Evaluation (IITP), Korea 2018 - Current

• Image/Video super-resolution for predictive visual intelligence technology.

Samsung Research, Seoul, Korea

2017 - 2018

• Generative spatio-temporal video super-resolution.

• Deep learning based DTV video quality improvement.

2018 2017

Korea Aerospace Research Institute (KARI), Korea

2015 - 2016

ullet Study on 6U-class satellite-mounted optical cameras and image super-resolution techniques.

SK Telecom, Seoul, Korea

2015

• Development of next generation imaging solution (light field imaging).

SKILLS

Programming Languages

• Python, Matlab, C/C++, Java

Tools

- Computer vision libraries (OpenCV)
- Deep learning libraries (Pytorch, Tensorflow)