Junyoung Hong

 \Box shamanneo | \Box mvalbsjea@gmail.com | \Box (+82)1077514096

EDUCATION

Yong In University

Mar 2022 - Present

B.S. in School of Artificial Intelligence GPA: 4.14/4.5 (Major GPA: 4.34/4.5)

Research Interests

3D Computer Vision

- Neural Rendering for 3D Human Avatar (NeRF, Gaussian Splatting)

Image Segmentation

Human Parsing

EXPERIENCE

Undergraduate Intern / Lab Manager

Mar 2022 - Present / Jan 2024 - Present

Machine Intelligence Lab. supervised by Prof. Kyungjae Lee, Yong In University

Researcher / Project Leader

Sep 2022 - Present

Development of Instance Segmentation Method for Mobile Devices

Development of Real-Virtual Environmental Analysis Based Adaptive Interaction Technology

PROJECTS

Development of Instance Segmentation Method for Mobile Devices

Sep 2022 - Mar 2023

Electronics and Telecommunications Research Institute (ETRI)

Researcher

Development of Real-Virtual Environmental Analysis Based Adaptive Interaction Technology

Mar 2023 - Present

Electronics and Telecommunications Research Institute (ETRI)

Project Leader

PUBLICATIONS

Generalized On-Device AI Framework for Semantic Segmentation

Junyoung Hong, Kyungjae Lee

Journal of the Korea Institute of Electronic Communication Sciences (KIECS), 2024

Patch Regularization in Visual State Space Model

Junyoung Hong, Hyeri Yang, Ye Ju Kim, Shinwoong Kim, Kyungjae Lee

International Technical Conference on Circuits/Systems, Computers and Communications (ITC-CSCC), 2024 (Oral Presentation)

A Screen of Slide Detection Method Using Deep Learning-Based Segmentation and Hough Transform

Junyoung Hong*, Sunguk Jung*, Yongwoo Lee, Hyeonbeom Heo, Hyeri Yang, Hayeon Kim, Kyungjae Lee (* equally contributed)

International Technical Conference on Circuits/Systems, Computers and Communications (ITC-CSCC), 2022 (Oral Presentation)

Selective Style Gaussian: Enabling Localized Style Transfer in 3D Scenes

Hyeri Yang, Hyeonbeom Heo, **Junyoung Hong**, Ye Ju Kim, Kyungjae Lee

International Technical Conference on Circuits/Systems, Computers and Communications (ITC-CSCC), 2024 (Oral Presentation)

Local Context Aggregation for Semantic Segmentation: A Novel PSPNet Approach

Haerim Kim, Ye Ju Kim, Junyoung Hong, Hyeri Yang, Euna Shim, Kyungjae Lee

International Technical Conference on Circuits/Systems, Computers and Communications (ITC-CSCC), 2024 (Oral Presentation)

Light Awareness Network for Shadow Detection

Ye Ju Kim, Junyoung Hong, Hyeonbeom Heo, Hyeri Yang, Soyeon Kim, Kyungjae Lee

International Conference of Next Generation Convergence Technology (ICNGCT), 2023 (Oral Presentation)

Paper in Progress

D2FP: Learning Implicit Prior for Human Parsing

 $\textbf{Junyoung Hong}, \, \text{Hyeri Yang}, \, \text{Ye Ju Kim}, \, \text{Haerim Kim}, \, \text{Shinwoong Kim}, \, \text{Euna Shim}, \, \text{Kyungjae Lee}$

Submitted to WACV 2025

SKILLS

Programming Language C/C++, Python
Deep Learning Framework PyTorch, Detectron2

Image Processing Library OpenCV

Windows Desktop Application Development Win32 API, Active Template Library (ATL)

Development Tools Git, Docker

LANGUAGE

Korean (Native), English (Advanced)

Last updated: September 23, 2024