

# Yuk Heo

Artificial Intelligence and Computer Vision Engineer  
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<https://github.com/yuk6heo>

## RESEARCH INTERESTS

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- Computer Vision
- Machine Learning

## EDUCATION

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Mar. 2018 ~ Present	<b>Korea University</b> School of Electrical Engineering <i>Advisor: Chang-Su Kim</i> <i>Ph.D. Student</i> GPA: 4.36 / 4.5	Seoul, Korea
Mar. 2014 ~ Feb. 2018	<b>Korea University</b> School of Electrical Engineering <i>B.S. in Electrical Engineering</i> GPA: 3.69 / 4.5	Seoul, Korea

## RESEARCH EXPERIENCES

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- Applied Scientist Intern at Amazon, United States (Jul. 2022 ~ Oct. 2022)

## AWARDS

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- Best Paper Candidate on Computer Vision and Pattern Recognition (CVPR), 2021
- 1st place on Interactive VOS track on CVPR2020 - DAVIS Challenge on Video Object Segmentation
- 2nd place on Interactive VOS track on CVPR2019- DAVIS Challenge on Video Object Segmentation

## CONFERENCE PUBLICATIONS

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1. Yuk Heo, Yeong Jun Koh, Chang-Su Kim, "Context-Aware Seam Restoration for Image Extension," in Visual Communication and Image Processing (VCIP), 2023
2. Yuk Heo, Yeong Jun Koh, Chang-Su Kim, "Guided Interactive Video Object Segmentation Using Reliability-Based Attention Maps," in Computer Vision and Pattern Recognition (CVPR), 2021 - Oral, Best Paper Candidate

3. Yuk Heo, Yeong Jun Koh, Chang-Su Kim, "Interactive Video Object Segmentation Using Global and Local Transfer Modules," European Conference on Computer Vision (ECCV), 2020
4. Yuk Heo, Yeong Jun Koh, Chang-Su Kim, "Inter-image Affinity based Interactive Video Object Segmentation," International Conference on Information and Communication Technology Convergence (ICTC), 2020
5. Yuk Heo, Yeong Jun Koh, Chang-Su Kim, "Interactive Video Object Segmentation Using Sparse-to-Dense Networks," Computer Vision and Pattern Recognition (CVPR) workshop, 2019

## JOURNAL PUBLICATIONS

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1. Yuk Heo, Yeong Jun Koh, Chang-Su Kim, "Local Memory Read-and-Comparator for Video Object Segmentation", *IEEE ACCESS*, (2022)
2. Yeong Jun Koh, Yuk Heo, Chang-Su Kim, "Sequential Clique Optimization for Unsupervised and Weakly Supervised Video Object Segmentation", *ELECTRONICS*, (2022)
3. Dong Kyu Lee, Deuk Jae Sung, Chang-Su Kim, Yuk Heo, Jeong Yoon Lee, Beom Jin Park, Min Ju Kim, "Three-Dimensional Convolutional Neural Network for Prostate MRI Segmentation and Comparison of Prostate Volume Measurements by Use of Artificial Neural Network and Ellipsoid Formula", *AMERICAN JOURNAL OF ROENTGENOLOGY*, (2020)

## SKILLS AND TECHNIQUES

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Python (pytorch, tensorflow, and other deep-learning related libraries), Matlab, C