

Hongsuk Choi

PERSONAL DETAILS

Phone (+82) 10-6219-7815
Mail redarknight@snu.ac.kr
Homepage [Google Scholar](#) / [Github](#)

RESEARCH INTERESTS

3D computer vision and deep learning, especially HCI-related topics including motion capture and 3D human shape reconstruction

EDUCATION

M.S. Candidate, Electrical and Computer Engineering Mar 2020 - Feb 2022
Seoul National University (SNU), Seoul, South Korea
Advisor: [Prof. Kyoung Mu Lee](#)

B.S., Computer Science and Engineering
Seoul National University (SNU), Seoul, South Korea

B.A., Business Administration Mar 2013 - Feb 2020
Seoul National University (SNU), Seoul, South Korea

PUBLICATIONS

- [1] **Hongsuk Choi**, Gyeongsik Moon, Joonkyu Park, and Kyoung Mu Lee, “Learning to Estimate Robust 3D Human Mesh from In-the-Wild Crowded Scenes”, **CVPR 2022**, [\[ARXIV\]](#), [\[CODE\]](#)
- [2] JoonKyu Park, Yeonguk Oh, Gyeongsik Moon, **Hongsuk Choi**, Kyoung Mu Lee, “HandOccNet: Occlusion-Robust 3D Hand Mesh Estimation Network”, **CVPR 2022**, [\[ARXIV\]](#), [\[CODE\]](#)
- [3] **Hongsuk Choi**, Gyeongsik Moon, Ju Yong Chang, and Kyoung Mu Lee, “Beyond Static Features for Temporally Consistent 3D Human Pose and Shape from a Video”, **CVPR 2021**, [\[ARXIV\]](#)[\[VIDEO\]](#)[\[CODE\]](#)
- [4] **Hongsuk Choi***, Gyeongsik Moon*, and Kyoung Mu Lee, “Pose2Mesh: Graph Convolutional Network for 3D Human Pose and Mesh Recovery from a 2D Human Pose” (* **equal contribution**), **ECCV 2020**, [\[ARXIV\]](#)[\[PDF\]](#)[\[VIDEO\]](#)[\[CODE\]](#)
- [5] **Hongsuk Choi***, Gyeongsik Moon*, Vincent Leroy, Kyoung Mu Lee, Gregory Rogez, “MonoNHR: Monocular Neural Human Renderer” (* **equal contribution**), under review
- [6] Gyeongsik Moon, **Hongsuk Choi**, Kyoung Mu Lee, “Accurate 3D Hand Pose Estimation for Whole-Body 3D Human Mesh Estimation”, **CVPR 2022 workshop**,

[\[ARXIV\]](#)[\[CODE\]](#)

[7] Gyeongsik Moon, **Hongsuk Choi**, Kyoung Mu Lee, “NeuralAnnot: Neural Annotator for 3D Human Mesh Training Sets”, **CVPR 2022 workshop**, [\[ARXIV\]](#)

[8] **Hongsuk Choi**, Hyeongjin Nam, Taeryung Lee, Gyeongsik Moon, Kyoung Mu Lee, “Which Data to Collect for 3D Human Pose and Shape Estimation from In-the-Wild Images?”, under review

HONORS

- **1st place** and **2nd place** at the *without association* track of **3D human pose estimation in the wild (3DPW) challenge**, workshop conjunction with **ECCV 2020** (1st in a joint orientation metric and 2nd in a joint position metric)
- **1st place** at the Qualcomm IT Tour 2019 presentation competition held by Qualcomm, proposed AR-based workout coaching system and selected as a winner by Jim Cathey (President of Qualcomm Global Business)
- Selected as a finalist in **Qualcomm Innovation Fellowship Korea 2020, 2021**

PROJECTS

HumanFit: A New Large-scale Dataset for Human Fitness
Evaluation and Feedback May 2020 - Dec 2020
[Dataset link](#) / co-op with Sleek, SuperbAI, KakaoBrain, and Wehealed

A Large-scale Dataset for 3D Human Pose and Mesh Estimation May 2020 - Dec 2020
[Dataset link](#) / co-op with SweetK and MotionTechnology

Human Part Segmentation for AI-based Animation Coloring Mar 2019 - Jun 2019
co-op with NCSOFT

EXPERIENCE

Research Intern

- Neural Human Rendering for an Arbitrary Person
with Implicit Function (NeRF) Apr 2021 - Oct 2021
NAVER LABS Europe, France
Advisor: [Gregory Rogez](#), Vincent Leroy

Teaching Assistant

- Introduction to Computer Programming Mar 2019 - Dec 2020
Department of Business Administration, SNU

Research Intern

- 3D Human Pose Estimation from a Single Image Aug 2019 - Feb 2020
Department of Electrical and Computer Engineering, SNU
Advisor: [Prof. Kyoung Mu Lee](#)

- Pedestrian Tracking from a Drone Captured Video Mar 2019 - Jul 2019
Department of Electrical and Computer Engineering, SNU
Advisor: [Prof. Kyoung Mu Lee](#)

Start-Up Team Leader & Software Engineer

- Workout Partner Matching and Diary Sharing Service Jul 2017 - Feb 2019
Publicly launched at App Store & Google Play Store

Software Engineer Internship

- Movie Poster Recognition and Trailer Play with OpenGL Jun 2018 - Aug 2018
NAVER, the largest IT company in South Korea
Advisor: Jaeho Lee

MILITARY SERVICE

Sergeant Squad Leader of Weather Group Mar 2015 - Mar 2017
Air Force, Republic of Korea

SKILLS

C, JAVA, PYTHON, PYTORCH, ANDROID, ANGULARJS, TYPESCRIPT, \LaTeX