

Mohsen YAVARTANOO

PERSONAL DATA

ACADEMIC EMAIL: myavartanoo@snu.ac.kr
NON-ACADEMIC EMAIL: myavartanoo71@gmail.com
PERSONAL PAGE: [LINK](#)
GOOGLE SCHOLAR: [LINK](#)
GITHUB: [LINK](#)
ADDRESS: 08826 | #508 Bldg. 133, 1 Gwanak-ro, Gwanak-gu, Seoul, Korea.

RESEARCH INTERESTS

Computer Vision
Deep Learning
3D Vision
Self-Supervised Learning

EDUCATION

- 2019 - present Ph.D. in Electrical and Computer Engineering, Seoul National University, Seoul, South Korea.
- 2017 - 2019 M.Sc in Electrical and Computer Engineering, Seoul National University, Seoul, South Korea.
- 2011 - 2016 B.Sc in Mathematical Science, Sharif University of Technology, Tehran, Iran.
- 2007 - 2010 Diploma in Mathematics and Physics, Shahid Babaie (National Organization for Development of Exceptional Talents (NODET)), Qazvin, Iran.

PUBLICATIONS

- | | |
|------|--|
| 2022 | CVF-SID: Cyclic multi-Variate Function for Self-Supervised Image Denoising by Disentangling Noise from Image (CVPR2022) <i>Reyhaneh Neshatavar*, Mohsen Yavartanoo*, Sanghyun Son, Kyoung Mu Lee</i> Link: CVF-SID |
| 2021 | PolyNet: Polynomial Neural Network for 3D Shape Recognition with PolyShape Representation. (3DV2021) <i>Mohsen Yavartanoo, Shih-Hsuan Hung, Reyhaneh Neshatavar, Yue Zhang, Kyoung Mu Lee</i> Link: PolyNet |
| 2021 | 3DIAS: 3D Shape Reconstruction with Implicit Algebraic Surfaces. (ICCV2021) <i>Mohsen Yavartanoo*, JaeYoung Chung*, Reyhaneh Neshatavar, Kyoung Mu Lee</i> Link: 3DIAS |
| 2018 | SPNet: Deep 3D Object Classification and Retrieval using Stereographic Projection. (ACCV2018) <i>Mohsen Yavartanoo, Euyoung Kim, Kyoung Mu Lee</i> Link: SPNet |

PROJECTS

- Self-supervised point cloud completion for single-view depth map. (Submitted to NeurIPS2022)

- Self-supervised image super-resolution. (Submitted to NeurIPS2022)
- CAD learning for manufacturing processes i.g., cutting, drilling, etc., and cost prediction for CNC machines. (Current)
- Unsupervised anomaly detection. (Current)
- Point cloud registration and template matching for volume calculation from multi-view captured RGBD data by iPhone depth camera. (Current)
- Vehicle, pedestrian, and traffic sign detection and recognition from point clouds for autonomous driving cars. (2019)

TEACHING EXPERIENCE

- Fall 2020 Seoul National University, Teaching Assistant, Department of Electrical and Computer Engineering, **Introduction to Computer Vision**.
- Fall 2015 Sharif University of Technology, Teaching Assistant, Department of Mathematics and Computer Science, **Image Processing**.
- Fall 2014 Sharif University of Technology, Teaching Assistant Department of Mathematics and Computer Science **Introduction to Linear Algebra**.
- Teaching Mathematical and Computer Science Olympiad for high-school students.

AWARDS AND SCHOLARSHIPS

- Graduate Scholarship for Excellent Foreign Students (GSFS) at SNU Fall 2019 (for two years)
- SNU Global Scholarship for Spring 2017 (for one year)
- Accepted in the first round of Iranian Mathematical Olympiad (IMO) 2009

OTHER ACADEMIC EXPERIENCES

- 2022 Invited to serve as a reviewer for CVPR2022.
- 2021 Invited to serve as a reviewer for ICCV2021.
- 2012-2016 Sharif University of Technology, Algorithms and Problem Solving Lab:
- 2011-2013 Member of Math Scientific and Extracurricular Group, Department of Mathematics and Computer Science, Sharif university of technology
- 2014 Editor of Sharif Mathematical Journal, Department of Mathematics and Computer Science, Sharif University of Technology

LANGUAGES

PERSIAN: Native
 ENGLISH: Fluent
 KOREAN: Basic
 ARABIC: Basic

COMPUTER SKILLS

Python, Matlab, PyTorch, TensorFlow, Houdini, Blender, \LaTeX

OTHER INTERESTS AND ACTIVITIES

Tar & SeTar (Traditional music instruments)

Climbing & Tennis

Watching Movies & Playing Video Games