Mehmet Aygun

https://mehmetaygun.github.io/

Email : mayguntr@gmail.com
Mobile : +44-739-845-8684
Github : github.com/MehmetAygun

Education

- **The University of Edinburgh** — Edinburgh, UK
  Doctor of Philosophy in Computer Science — *Sep. 2021 – Current*
- **Technical University of Munich** — Munich, Germany
  Master of Science in Computer Science — *Oct. 2018 – Dec. 2020*
- **Istanbul Technical University** — Istanbul, Turkey
  Bachelor of Science in Computer Science — *Sep. 2013 – June. 2017*

Research Experience

- **Meta AI** — CA, USA
  Research Scientist Intern — *Aug 2023 - Feb 2024*
  - **Self-supervised Learning & 3D**: Focused on self-supervised learning and 3D reconstruction, especially focusing on how each can benefit to other. Advisors: Dr. Zhicheng Yan, Dr. Rakesh Ranjan
- **Institute for Adaptive and Neural Computation** — Edinburgh, UK
  Postgraduate Research Student — *Sep 2021 - Current*
  - **Shape & Semantics**: Developing models for 3D reconstruction focused on articulated objects and exploring the role of shape in semantic tasks like correspondence and fine-grained classification. Advisor: Dr. Oisin Mac Aodha.
- **TUM Computer Vision Lab** — Munich, DE
  Research Student — *Oct 2018 - Jun 2021*
  - **Holistic Scene Analysis**: Worked on semantic/instance segmentation and multi object tracking with Lidar data. Advisors: Prof. Laura Leal-Taixe, Dr. Aljosa Osep.
  - **3D Shape Analysis**: Worked on shape correspondence problem with self-supervised deep learning methods using functional maps and heat kernels. Advisors: Prof. Daniel Cremers, Dr. Zorah Lahner.

Publications

- **M. Aygun**, O. Mac Aodha, "SAOR: Single-view Articulated Object Reconstruction", Arxiv, 2023
- **M. Aygun**, O. Mac Aodha, "Demystifying Unsupervised Semantic Correspondence Estimation", In European Conference on Computer Vision (**ECCV**), 2022
- **M. Aygun**, A. Osep, M.Weber, M.Maximov, C. Stachniss, J. Behley, L. Lael-Taixe, "4D Panoptic Lidar Segmentation", In Conference on Computer Vision and Pattern Recognition (**CVPR**), 2021
- **M. Aygun**, Z. Lahner, D. Cremers, "Unsupervised Dense Shape Correspondence using Heat Kernels", In International Conference on 3D Vision (**3DV**), 2020
- **M. Aygun**, Y. Aytar, H. K. Ekenel, "Exploiting Convolution Filter Patterns for Transfer Learning", In ICCV TASK-CV workshop, 2017. **(Honourable Mention Award)**

Skills

- Python, C/C++, PyTorch{3D}, OpenCV, Numpy, Matlab, Linux, Git

Activities

- Reviewer for TPAMI, ICCV23, CVPR{22, 23} ECCV22, 3DV22, FGVC{9,10}
- Tutoring for Introduction to ML Course at UoE 2021, 2022

References

- **Dr. Oisin Mac Aodha**(oisin.macaodha@ed.ac.uk), **Prof. Laura Leal-Taixe** (leal.taixe@tum.de)