Alp Eren SARI

Computer Vision Group Email: alp.sari@unibe.ch

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3012, Bern, Switzerland LinkedIn: alperensari

Education

2020– Ph.D., Institute of Computer Science, University of Bern, Bern, Switzerland

Supervisor: Prof. Paolo Favaro

Research interests: unsupervised disentangled representation learning, unsupervised semantic segmentation, denoising diffusion-based generative mod-

els

2018–2020 M.Sc., Electrical and Electronics Engineering, Middle East Technical Uni-

versity, Ankara, Turkey

Thesis Title: A Thorough Analysis of Unsupervised Depth and Ego-motion

Estimation

Supervisors: Prof. Aydın Alatan and Assoc. Prof. Sinan Kalkan

CGPA: 3.71/4.00

2013–2018 B.Sc., Electrical and Electronics Engineering, Middle East Technical Uni-

versity, Ankara, Turkey

CGPA: 3.71/4.00, Ranking: 18 out of 376

Appointments

2020– Research and Teaching Assistant, Institute of Computer Science, University of Bern,

Bern, Switzerland

2018–2020 Researcher, Center for Image Analysis, Middle East Technical University, Ankara,

Turkey

2017–2017 Intern, Physical Intelligence Department of Max Planck Institute for Intelligent Sys-

tems, Stuttgart, Germany

2016–2016 Intern, Arcelik A.S., Ankara, Turkey

Relevant Projects

- Least Squares Meshes: The algorithm is developed in C++ using the libigl library. Available on GitHub.
- Optimization: Various optimization algorithms including gradient descent method, Newton method, and Davidon-Fletcher-Powell method

Achievements

Ranked 80^{th} in the national university entrance examination (YGS-LYS) out of 231,040 candidates

Computer Skills

Previous experience in Python, C/C++, OpenCV, PIL, Pytorch, Scikit-Learn

Selected Publications

A. E. Sari, F. Locatello, and P. Favaro, "Two Tricks to Improve Unsupervised Segmentation Learning,", *arXiv preprint arXiv:2404.03392*, 2024

Link to publication

A. Lemkhenter, A. Bielski, A. E. Sari, and P. Favaro. "Generative Adversarial Learning via Kernel Density Discrimination." *arXiv preprint arXiv:2107.06197*, 2022. Link to publication

M. Turan, Y. Almalioglu, H. B. Gilbert, A. E. Sari, U. Soylu, and M. Sitti, "Endo-vmfusenet: A deep visual-magnetic sensor fusion approach for endoscopic capsule robots," in *2018 IEEE International Conference on Robotics and Automation (ICRA)*, pp. 1–7, IEEE, 2018.

Link to publication

I. G. Dino, E. Kalfaoglu, A. E. Sarı, S. Akin, O. K. Iseri, A. A. Alatan, S. Kalkan, and B. Erdogan, "Automated building energy modeling for existing buildings using computer vision," in *CIB W78: Conference: Advances in ICT in Design, Construction and Management in Architecture, Engineering, Construction and Operations (AECO)*, 2019.

Link to publication