Alp Eren SARI

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Education

2020–	Ph.D., Institute of Computer Science, University of Bern, Bern, Switzerland
	Supervisor: Prof. Paolo Favaro
	Research interests: unsupervised representation learning, self-supervised contrastive learning
2018–2020	M.Sc., Electrical and Electronics Engineering, Middle East Technical University, Ankara, Turkey
	Thesis Title: A Thorough Analysis of Unsupervised Depth and Ego-motion Estimation
	Supervisors: Prof. Aydın Alatan and Assoc. Prof. Sinan Kalkan
2013–2018	B.Sc., Electrical and Electronics Engineering, Middle East Technical University, 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

Computer Skills

- Programming Languages: Python, C/C++
- Computer Vision Libraries: OpenCV, PIL
- Machine Learning Libraries: Pytorch, Tensorflow, Scikit-Learn

Relevant Projects

- Least Squares Meshes: Algorithm is developed on C++ using libigl library. Available on Github.
- Spatio-Temporal Transformer Network for Video Restoration (ECCV 2018): The proposed network is implemented on Python using Pytorch library. Available on Github.
- Optimization: Various optimization algorithms including gradient descent method, Newton method, and Davidon-Fletcher-Powell method, and various line search algorithms including fibonacci , golden section, dichotomous, and Lagrange search is implemented on MATLAB. Available on Github.

Professional Activities

• Student Volunteer, International Conference on Computer Vision 2019, Seoul, Korea.

Achievements

2013 Ranked 80^{th} in the national university entrance examination (YGS-LYS) out of 231,040 candidates

Scholarships

2014–2018 Outstanding Achievement Scholarship from the Ministry of Youth and Sport of Turkey

Publications

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

M. Turan, Y. Almalioglu, H. B. Gilbert, F. Mahmood, N. J. Durr, H. Araujo, A. E. Sarı, A. Ajay, and M. Sitti, "Learning to navigate endoscopic capsule robots," *IEEE Robotics and Automation Letters*, vol. 4, no. 3, pp. 3075–3082, 2019. Link to publication

I. G. Dino, E. Kalfaoglu, A. E. Sarı, S. Akin, O. K. Iseri, A. A. Alatan, S. Kalkan, and B. Erdo- gan, "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