FURKAN KINLI

Ph.D., Research Assistant

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SUMMARY

Recent Ph.D. in Computer Science specializing in Image Processing and Computational Photography. I'm seeking academic or post-doctoral opportunities to contribute to cutting-edge research and facilitate knowledge transfer within these areas.

EDUCATION

Ph.D. in Computer Science @ Özyeğin University

(2019 - 2025)

Dissertation Title: "Modeling the Lighting as Style Factor via Neural Networks for White Balance Correction"

M.Sc. in Computer Science @ Özyeğin University

(2018 - 2019)

Thesis Title: "Clothing Image Retrieval with Triplet Capsule Networks"

B.Sc. in Computer Science in Engineering @ Özyeğin University

(2012 - 2018)

RESEARCH INTEREST

Inverse problems in Imaging, Image Signal Processors (ISP), Camera Pipeline, Color Science, Image Restoration and Enhancement.

TEACHING

Lecturer: Introduction to Programming with Python	(24' Summer)
Lecturer: Physical Education 104 (4 credits & non-area)	(15' F - 20' S)
TA: (UG) Programming Languages	(4 Terms)
TA: (UG) Data Structures and Algorithms	(4 Terms)
TA: (G) Introduction to Data Science	(4 Terms)
TA: (G) Introduction to Computer Vision	(2 Terms)
TA: (G) Advanced C++ Programming	(2 Terms)

EXPERIENCE

Co-Founder & AI Director: T-Fashion (<i>Canada & Türkiye</i>)	(2019 - Present)
Research Engineer (CV & DL): Fishency Innovation (Norway - Remote)	(2020 - 2024)
Engineer (ML): eBay & GittiGidiyor (Türkiye)	(2017 - 2018)
Intern Engineer (BI & Data): Türk Telekom (<i>Türkiye</i>)	(06.2017 - 08.2017)

PUBLICATIONS

- ★ F. Kınlı, F. Kıraç. "Feature distribution statistics as a loss objective for robust white balance correction." *Machine Vision and Applications*, 36(3), 1-20, 2025.
- ★ F. Kınlı, B. Özcan, F. Kıraç. "Advancing white balance correction through deep feature statistics and feature distribution matching." *Journal of Visual Communication and Image Representation*, 108, 104412, 2025.
- ★ N. Banić, E. Ershov, A. Panshin, ..., **F. Kınlı**, ..., R. Timofte. "NTIRE 2024 challenge on night photography rendering." *Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition Workshops*, 2024.
- ★ B. Özcan, **F. Kınlı**, F. Kıraç. "Generalization to unseen viewpoint images of objects via alleviated pose attentive capsule agreement." *Neural Computing and Applications*, 2023, 35(4), 3521-3536.
- ★ A. Shutova, E. Ershov, G. Perevozchikov, ..., **F. Kınlı**, ..., R. Timofte. "NTIRE 2023 challenge on night photography rendering." *Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition Workshops*, 2023, pp. 1982–1993.
- ★ F. Kınlı, B. Özcan, F. Kıraç. "[Re] Exact Feature Distribution Matching for Arbitrary Style Transfer and Domain Generalization." *ML Reproducibility Challenge*, 2023.
- ★ F. Kınlı, D. Yılmaz, B. Özcan, F. Kıraç. "Deterministic Neural Illumination Mapping for Efficient Auto-White Balance Correction." *Proceedings of the IEEE/CVF International Conference on Computer Vision*, 2023, pp. 1139–1147.
- ★ F. Kınlı, D. Yılmaz, B. Özcan, F. Kıraç. "Modeling the Lighting in Scenes as Style for Auto White-Balance Correction." *Proceedings of the IEEE/CVF Winter Conference on Applications of Computer Vision*, 2023, pp. 4903–4913.
- ★ F. Kınlı, B. Özcan, F. Kıraç. "Reversing image signal processors by reverse style transferring." Computer Vision–ECCV 2022 Workshops, 2023, pp. 688–698.
- ★ F. Kınlı, S. Menteş, B. Özcan, F. Kıraç, R. Timofte, Y. Zuo, Z. Wang, X. Zhang, ... "Aim 2022 challenge on instagram filter removal: Methods and results." *Computer Vision–ECCV* 2022 *Workshops*, 2023, pp. 27–43.
- ★ F. Kınlı, B. Özcan, F. Kıraç. "Patch-wise contrastive style learning for instagram filter removal." Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition, 2022, pp. 578–588.
- ★ M.V. Conde, R. Timofte, Y. Huang, ..., F. Kınlı, ..., R. Timofte. "Reversed image signal processing and RAW reconstruction. AIM 2022 challenge report." *European Conference on Computer Vision*, 2022, pp. 3–26.
- ★ E. Ershov, A. Savchik, D. Shepelev, N. Banić, M.S. Brown, R. Timofte, ..., F. Kınlı, ... "NTIRE 2022 challenge on night photography rendering." *Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition Workshops*, 2022, pp. 1287–1300.
- ★ F. Kınlı, B. Özcan, F. Kıraç. "Instagram filter removal on fashionable images." *Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition*, 2021, pp. 736–745.
- ★ B. Özcan, **F. Kınlı**, F. Kıraç. "Quaternion capsule networks." *25th International Conference on Pattern Recognition (ICPR)*, 2021, pp. 6858–6865.
- ★ F. Kınlı, B. Özcan, F. Kıraç. "A benchmark for inpainting of clothing images with irregular holes." *Computer Vision–ECCV 2020 Workshops*, 2020, pp. 182–199.

- ★ S. Menteş, **F. Kınlı**, B. Özcan, F. Kıraç. "[Re] Spatial-Adaptive Network for Single Image Denoising." *ML Reproducibility Challenge*, 2020.
- ★ F. Kınlı, B. Özcan, F. Kıraç. "Description-aware fashion image inpainting with convolutional neural networks in coarse-to-fine manner." Proceedings of the 2020 6th International Conference on Computer and Technology Applications (ICCTA), 2020, pp. 74–79.
- ★ F. Kınlı, F. Kıraç. "FashionCapsNet: Clothing classification with capsule networks." *Bilişim Teknolojileri Dergisi*, 13(1), 87-96, 2020.
- ★ F. Kınlı, B. Özcan, F. Kıraç. "Fashion image retrieval with capsule networks." Proceedings of the IEEE/CVF International Conference on Computer Vision Workshops, 2019, pp. 36.
- ★ F. Kınlı. Clothing image retrieval with triplet capsule networks. Ozyegin University, 2019.

ACADEMIC SERVICES

Reviewer: IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI)

Reviewer, Elsevier Digital Signal Processing

Reviewer, IEEE/CAA Journal of Automatica Sinica

Reviewer, Imaging Science Journal

Reviewer, Journal of Experimental & Theoretical Artificial Intelligence

Reviewer, the IEEE / CVF Computer Vision and Pattern Recognition Conference (CVPR) (25', 24', 23')

Reviewer, the International Conference on Computer Vision (ICCV) (25', 23')

Reviewer, the European Conference on Computer Vision (ECCV) (24', 22')

Reviewer, IEEE/CVF Winter Conference on Applications of Computer Vision (WACV) (25', 24', 23')

Reviewer, The 39th Annual AAAI Conference on Artificial Intelligence (AAAI) 25'

Reviewer, International Conference on Pattern Recognition (ICPR) 24'

Reviewer, New Trends in Image Restoration and Enhancement workshop and challenges on image and video processing at CVPR (NTIRE) (24', 23', 22', 21')

Reviewer, Advances in Image Manipulation workshop in conjunction with ECCV (AIM) (24', 22', 20')

Reviewer, Resource Efficient Deep Learning for Computer Vision workshop at ICCV (RCV) (23')

Reviewer, 30th IEEE Conference on Signal Processing and Communications Applications

Reviewer, ML Reproducibility Challenge 2022 Edition

Reviewer, ML Reproducibility Challenge 2021 Edition

TEACHING INTEREST

Image Processing Fundamentals, Machine Learning Fundamentals, Deep Learning for Computer Vision, Advanced Topics in Image Restoration, Generative Models for Visual Content

AWARDS

Recipient: ML Reproducibility Challenge 2022

Nomination for Outstanding Reviewer: ML Reproducibility Challenge 2022

4th Place: NTIRE 2022 Challenge on Night Photography Rendering 7th Place: NTIRE 2023 Challenge on Night Photography Rendering