Eduard Zamfir

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Education

Ph.D. Computer Science, University of Wurzburg

Aug 2022 - Present

- Focus: Computer Vision, Machine Learning
- Advisor: Prof. Radu Timofte

M.Sc. Computational Engineering, Technical University of Darmstadt

Apr 2020 - May 2022

- Focus: Computer Vision, Machine Learning
- Advisor: Prof. Stefan Roth

B.Sc. and M.Sc. Mechanical Engineering, Technical University of Darmstadt

Oct 2013 - Mar 2020

- Focus: Mechatronics and automotive engineering
- Completed 114/120 ECTS in M.Sc. Mechanical Engineering

Publications / Preprints

- 1. Y. Tan, J. Shao, **E. Zamfir**, R. Li, Z. An, C. Ma, D. Paudel, L. van Gool, R. Timofte, Z. Wu, "What You Have is What You Track: Adaptive and Robust Multimodal Tracking", *ICCV*, 2025
- 2. Y. Tan, Z. Wu, Y. Fu, Z. Zhou, G. Sun, **E. Zamfir**, C. Ma, D. Paudel, L. van Gool, R. Timofte, "XTrack: Multimodal Training Boosts RGB-X Video Object Trackers", *ICCV*, 2025
- 3. **E. Zamfir**, Z. Wu, N. Mehta, Y. Tan, D. Paudel, Y. Zhang, R. Timofte, "Complexity Experts are Task-Discriminative Learners for Any Image Restoration", *CVPR*, 2025.
- 4. J. Li, Z. Wu, E. Zamfir, R. Timofte, "ReCap: Better Gaussian Relighting with Cross-Environment Captures", *CVPR*, 2025.
- 5. **E. Zamfir**, Z. Wu, N. Mehta, Y. Zhang, R. Timofte, "See More Details: Efficient Image Super-Resolution by Experts Mining", *ICML*, 2024.
- 6. E. Zamfir, Z. Wu, N. Mehta, D. Paudel, Y. Zhang, R. Timofte, "Efficient Degradation-aware Any Image Restoration", arXiv, 2024.
- 7. B. Ren, E. Zamfir, Z. Wu, Y. Li, Y. Li, D. Paudel, R. Timofte, M.H. Yang, N. Sebe, "Restore Anything Model with Efficient Degradation Adaptation", arXiv, 2024
- 8. Z. Fang, A. Ignatov, **E. Zamfir**, R. Timofte, "SQAD: Automatic Smartphone Camera Quality Assessment and Benchmarking", *ICCV*, 2023.
- 9. E. Zamfir, M. Conde, R. Timofte, "Towards Real-Time 4K Image Super-Resolution", CVPRW, 2023.
- 10. S. Bahmani*, O. Hahn*, **E. Zamfir***, N. Araslanov, D. Cremers, and S. Roth, "Semantic Self-Adaptation: Enhancing Generalization with a Single Sample", *TMLR*, 2023.

Academic Service

Reviewer: CVPR (24/25), ICCV (23/25), NeurIPS (24/25), ICLR (25), ICML (25), TPAMI (23/25), WACV (25), TIP (23), ACM Multimedia (25)

Conference Workshops: Co-Organizer Real-Time 4K Super-Resolution Challenge, NTIRE@CVPR 2023 and Efficient Super-Resolution Challenge, NTIRE@CVPR 2024

Teaching Assistant: Computer Vision, Image Processing and Computational Photography

Research Experience

Master Thesis at Visual Inference Lab, TU Darmstadt

Nov 2021 – May 2022

- Exploiting non-local dependencies for image restoration using attribution priors
- Advisors: Robin Hesse, Prof. Stefan Roth

 Student Research Assistant at Visual Inference Lab, TU Darmstadt Domain generalization for semantic segmentation Advisors: Nikita Araslanov, Prof. Stefan Roth 	Sep 2020 – Sep 2021
 Student Research Assistant at Fraunhofer LBF HiL-testbench for driving dynamics simulations Advisors: Riccardo Bartolozzi, Prof. Tobias Melz 	Apr 2019 – Apr 2020
 Bachelor Thesis at Institute for Mechatronic Systems, TU Darmstadt Simulation of hybrid energy storage systems for industrial applications Advisor: Prof. Stefan Rinderknecht 	Apr 2017 – Oct 2017
Work Experience	
Intern at Porsche Engineering Group • Driving Performance Team: Software engineering for driving dynamics simulation	Aug 2018 – Feb 2019
Academic Supervision	
 Student Project: Roman Kochnev, University of Wurzburg Topic: Dynamic Vision Models for Image Restoration Co-Supervisors: Prof. Radu Timofte 	Ongoing
 Master Thesis: Tobias Brandner, University of Wurzburg Topic: Real-Time Rendering Super Resolution with Unreal Engine 5 	2024