Doğa Yılmaz

London, UK | yilmaz.doga@gmail.com | linkedin/yilmazdoga | github/yilmazdoga | yilmazdoga.net

EDUCATION

2024 – Present **PhD in Computer Science – University College London**
- Faculty of Engineering Sciences, Department of Computer Science
- Advisor: Prof. He Wang and Prof. Tobias Ritschel
- Research Interests: Computer Graphics, Neural Rendering

2021 – 2023 **MSc in Artificial Intelligence – Özyeğin University**
- Faculty of Engineering, Department of Computer Science – Awarded Fellowship – GPA: 3.81/4.00
- Advisor: Assoc. Prof. Dr. Furkan Kıraç
- Research Interests: Computer Vision, Computer Graphics, Inverse Rendering
- Thesis: Illumination-Guided Inverse Rendering Benchmark: Learning Real Objects with Few Cameras

2016 – 2020 **BSc in Computer Science — Özyeğin University**
- Faculty of Engineering, Department of Computer Science
- Advisor: Assoc. Prof. Dr. Furkan Kıraç
- Thesis: Deep Residual Autoencoder for Real Image Denoising

PUBLICATIONS

2026 **Yılmaz D.**, Zhu J., Gong D., and Wang H., Graphical X Splatting (GraphiXS): A Graphical Model for 4D Gaussian Splatting under Uncertainty, ACM SIGGRAPH 2026

2025 **Yılmaz D.**, Wang H., Takikawa T., Ceylan D., and Akşit, K., Learned Single-Pass Multitasking Perceptual Graphics for Immersive Displays, ACM Multimedia 2025

2023 Kınlı F., **Yılmaz D.**, Özcan B., and Kıraç F., DeNIM: Deterministic Neural Illumination Mapping for Efficient Auto-White Balance Correction, IEEE ICCV Workshop on Resource Efficient Deep Learning for Computer Vision, 2023.

2023 **Yılmaz D.** and Kıraç F., Illumination-guided inverse rendering benchmark: Learning real objects with few cameras. Computers & Graphics, 115, 107-121.

2023 Kınlı F., **Yılmaz D.**, Özcan B., and Kıraç F., Modeling the Lighting in Scenes as Style for Auto White-Balance Correction, IEEE/CVF Winter Conference on Applications of Computer Vision (WACV), 2023.

2022 **Yılmaz, D.**, Kınlı, F., Özcan, B., and Kıraç, F., "[Re] Lifting 2D StyleGAN for 3D-Aware Face Generation", ReScience C, 8(2), 2022. Presented at NeurIPS 2022 Journal Track.

AWARDS AND ACHIEVEMENTS

03/2025 Awarded the Dr. Rabin Ezra Scholarship in support of my research.

02/2024 Received the Scientific and Technological Research Council of Turkey (TÜBİTAK) UBYT Award for my published research.

01/2021 Awarded departmental fellowship covering tuition and stipend support for my MSc studies at Özyeğin University.

INDUSTRY EXPERIENCE

08/2022 – 01/2025 **Computer Vision Research Engineer**

Fishency Innovation – Stavanger, Norway (Remote)
- Key contributor to the development of an inverse rendering–based underwater fish biomass estimation method, resulting in a peer-reviewed publication and a highly accurate system achieving over 90% accuracy in biomass estimation. Used tools including Mitsuba 3 and PyTorch.
- Deployed and scaled the underwater fish biomass estimation system on a hybrid computing infrastructure.
- Developed 2D and 3D visualization tools for validating and debugging multiple machine learning pipelines.

ACADEMIC EXPERIENCE

11/2023 – 10/2024 **Research Intern**

University College London – London, UK
- Worked on text-guided image-to-image translation models that apply multiple perceptual effects to real-world images.
- Contributed to the development of "Odak," an open-source scientific computing framework for optical sciences, computer graphics, and visual perception.

02/2021 – 10/2023 **Graduate Research & Teaching Assistant**

Özyeğin University Vision and Graphics Laboratory (VGL) – Istanbul, Turkey
- Actively participated in research mainly on inverse rendering and auto-white balance correction, yielding multiple publications.
- Contributed as a teaching assistant across a range of university courses, offering academic support and guidance to students.
- Courses Assisted: Advanced C++ Programming, Programming Paradigms, Data Structures and Algorithms, Object-Oriented Programming, Agile Software Development

SKILLS

Languages English: Advanced (IELTS: 7.5/9), German: Beginner, Turkish: Native

Programming Python, Modern C++(17/20), Java

Technologies PyTorch/LibTorch, CUDA, Mitsuba 3, OpenCV, OpenMP, AWS(S3, EC2, Rekognition), Docker, Blender3D, Unreal Engine 5