Marco Schouten

PhD Student

Research Interests How to make machines understand the world through generative modeling. Education 11/2023— **Ph.D. Computer Science**, Technical University of Denmark, Copenhagen, DK Advisors: Dim P. Papadopoulos, Serge Belongie 08/2020- M.Sc. Machine Learning, KTH Royal Institute of Technology, Stockholm, SE 09/2022 GPA 4.84/5.00 08/2021 - Exchange Computer Science, Delft University of Technology, Delft, NL 01/2022 09/2017 B.Sc. Computer Engineering, University of Genoa, Genoa, IT Final Grade: 109/110 (Rank 4/150) 07/2020 Experience 10/2023 - **PhD Student**, DTU & Pioneer Centre for AI), Copenhagen, DK Present Advisors: Dim P. Papadopoulos, Serge Belongie Research on generative models for image generation and understanding. 01/2023 - **Research Intern**, Aptiv, Düsseldorf, DE 10/2023 Supervisor: Pascal Colling Developed a deep learning algorithm for HD map generation from radar and LiDAR data. 01/2022- Research Intern, KTH & SMaRC, Stockholm, SE 09/2022 Supervisor: John Folkesson Developed a pose estimation algorithm for underwater vehicles from sonar data. Awards 2025 Selected, International Computer Vision Summer School (ICVSS) 2021 Mentee, LeadTheFuture Mentorship Program 2020 Hattrick Award, KTH 2018–2020 Scholarship, University of Genoa Teaching

2024–2025 Teaching Assistant, Introduction to Deep Learning in Computer Vision (DTU)
2025 Teaching Assistant, Advanced Deep Learning in Computer Vision (DTU)

2024–2025 Academic Support, SPS (DTU), Copenhagen, Denmark

Publications

- 1 **Schouten, M.**, Kaya, M.O., Belongie, S., Papadopoulos, D.P. "Instruction-Guided Precise Image Editing Using Multimodal LLMs." *CVPR Workshops*, 2025. [PDF]
- 2 **Schouten, M.**, Kaya, M.O., Belongie, S., Papadopoulos, D.P. "POEM: Precise Object-Level Editing via MLLM Control." *SCIA*, 2025. [arXiv]
- 3 Cadermatori, L., Galatà, G., Monaco, C.L., Maratea, M., Mochi, M., **Schouten, M.** "An ASP-Based Approach to Master Surgical Scheduling." *CILC*, 2022. [PDF]
- 4 Alviano, M., Bertolucci, R., Cardellini, M., Dodaro, C., Galatà, G., Khan, M.K., Maratea, M., Mochi, M., Morozan, V., Porro, I., **Schouten, M.** "Answer Set Programming in Healthcare: Extended Overview." *AI*IA*, 2020. [PDF]

Skills

Programming Python, PyTorch, LaTeX

Tools Git, Bash, High-performance computing (HPC)

Languages English, Italian