FABIO QUATTRINI

PhD Candidate in Computer Vision @ AlmageLab, Modena (MO), Italy

🔗 fabioquattrini.com | 🗷 fabio.quattrini@unimore.it | **in** Fabio Quattrini | 🗘 quattrinifabio | 🕿 Fabio Quattrini

RESEARCH INTERESTS

PhD candidate at AImageLab, supervised by Prof. Rita Cucchiara and Dr. Silvia Cascianelli. Working on Computer Vision for Cultural and Historical Multimodal Sources. Main interest in Vision-Language models, Generative and Document AI.

EDUCATION

Ph.D. student in Information and Communication Technologies (ICT)

01/2023 - 03/2026

AlmageLab, University of Modena and Reggio Emilia

Modena, Italy

Supervisors: Prof. Rita Cucchiara, Dr. Silvia Cascianelli.

Master's degree in Computer Engineering | Artificial Intelligence Engineering

10/2019 - 12/2022

University of Modena and Reggio Emilia

Modena, Italy

Grade: 110/110 cum laude. GPA: 4.0/4.0. Thesis: Introducing Vision Transformers in DDPMs. [paper]

Work Experience

Applied Scientist Intern

September 2024 - March 2025

CVNA, Amazon

Berlin, Germany

- Research on Foundation GenAI models to improve Visual Understanding and Generation in Images with Text.
- Managed project planning. Supervised data collection and annotation team.

November 2021 - December 2022

AlmageLab, University of Modena and Reggio Emilia

Modena, Italy

- Implemented and Designed novel Generative Vision Transformer models for Diffusion Image Generation.
- Distributed training of Denoising Diffusion Probabilistic Models. Achieved competitive FID scores.

SELECTED PUBLICATIONS (FULL LIST HERE)

Zero-Shot Styled Text Image Generation, but Make It Autoregressive. Vittorio Pippi*, Fabio Quattrini*, Silvia Cascianelli, Alessio Tonioni, Rita Cucchiara. CVPR 2025. [paper] [code] [huggingface]

Alfie: Democratising RGBA Image Generation With No \$\$\$. Fabio Quattrini, Vittorio Pippi, Silvia Cascianelli, Rita Cucchiara. "AI for Visual Arts Workshop" ECCV 2024 (Oral Spotlight, Top-4). [paper] [code]

Merging and Splitting Diffusion Paths for Semantically Coherent Panoramas. Fabio Quattrini, Vittorio Pippi, Silvia Cascianelli, Rita Cucchiara. ECCV 2024. [paper] [code]

ugat: Improving Single-Page Document Parsing by Providing Multi-Page Context. Fabio Quattrini*, Carmine Zaccagnino*, Silvia Cascianelli, Rita Cucchiara. "AI for Digital Humanities Workshop" ECCV 2024. [paper] [code]

Binarizing Documents by Leveraging both Space and Frequency. Fabio Quattrini, Vittorio Pippi, Silvia Cascianelli, Rita Cucchiara. ICDAR 2024 (Oral). [paper] [code]

HWD: A Novel Evaluation Score for Styled Handwritten Text Generation. Vittorio Pippi, Fabio Quattrini, Silvia Cascianelli, Rita Cucchiara. BMVC 2023. [paper] [code]

Segmentation-based Low-Resource Text Line Recognition. Carlos Garrido Munoz, Fabio Quattrini, Carmine Zaccagnino, Silvia Cascianelli, Costanza Bianchi, Jorge Calvo-Zaragoza, Rita Cucchiara. Under Review.

AWARDS & CERTIFICATIONS

International Computer Vision Summer School - ICVSS2024 Italian Qualification to practice as an Engineer

07/2024 12/2023

ELLIS Summer School Large-Scale AI. Best project award. Camera Pose Refinement for Radiance Fields 09/2023

09/2023

International Summer School on Machine Vision - VISMAC23 Kaggle Vesuvius Challenge - Ink Detection | Silver Medal

06/2023

REVIEWER FOR JOURNALS AND CONFERENCES

ICDAR 2023, ICIAP 2023, BMVC 2023, CVPR 2024, ECCV 2024, BMVC 2024 (Outs.), CVPR 2025 (Outs.), BMVC 2025

GRANTS

EuroHPC: Development and Benchmark grants for research on Infographics Editing with Autoregressive Models. Italian SuperComputing Resource Allocation (ISCRA): Class C grant for efficient training of Generative Models.

KNOWLEDGE AND COMPUTER SKILLS

Programming: Python (Proficiency), Java, C, SQL | PyTorch, NumPy, OpenCV, Pandas, PyRobot, Scikit, Huggingface Miscellaneous: AWS (EC2, SageMaker, Rekognition), Google Cloud, Slurm, WandB Languages: English (Fluent), Italian (Mother Tongue), French (Basic)