






Links

-  [Google Scholar](#)
-  [Website](#)
-  [X](#)
-  [Linkedin](#)
-  [GitHub](#)

Objective

Looking for an internship in Deep Learning, Computer Vision, Text-to-Image Generative Models, and Vision-Language Models.

Research Interests

Image Synthesis
Vision-Language Models
Fairness · Bias · Safety
Deep Learning
Artificial Intelligence

Personal Information

Birth Date: 11th May 1998
Nationality: Italian

Languages

Italian (native)
English (proficient)

Contact Information

morenodinca@gmail.com
moreno.dinca@unitn.it

Academic Service

ECCV 2024 · Reviewer
ECCV 2024 · Volunteer

Awards

Full PhD Scholarship funded by UniTN and PicsArt AI Research (PAIR) · 2022–2025

AI4Media Junior Fellows Exchange Program Scholarship · Visiting Research Student · Queen Mary University of London (UK) · 2022

International Computer Vision Summer School 2023 (Scicli, Italy) · Acceptance Rate 28%

Moreno D’Incà

PhD Student, University of Trento

I am a Ph.D. student at the Multimedia and Human Understanding Group (MHUG) – University of Trento (Italy), under the supervision of Prof. Nicu Sebe. My research centers on Text-to-Image generative models and Vision-Language models, with a focus on fairness and safety. I hold a Master’s degree in Artificial Intelligence from the University of Trento (Italy), with my Master's thesis completed at Queen Mary University of London (UK) through the AI4Media Junior Fellows Exchange Program Award.

EXPERIENCE

NOV 2022 - *Current*

PhD Collaboration · PicsArt AI Research (PAIR)

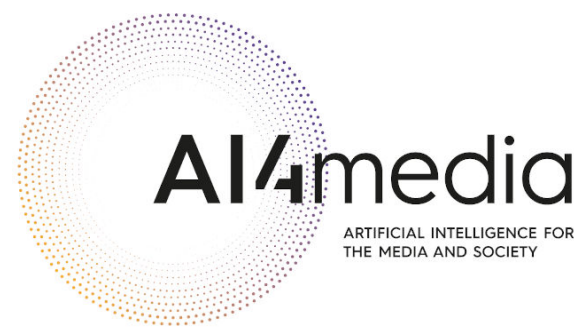
-  Remote
- Supervisors: Humphrey Shi, Zhangyang (Atlas) Wang
- Topics: Deep-Learning, Text-to-Image Generation, Image Editing, Fairness



MAY 2022 - MAY 2023

Junior Research Fellow · AI4Media

-  Queen Mary University of London (UK) - University of Trento (Italy)
- Topics: Deep Learning, Text-to-Image Generation, Image Editing, Fairness



APR 2020 - JAN 2021


Internship · Vui, Inc

-  Trento (Italy)
- Topics: Machine Learning, Data Retrieval



SEP 2019 - MAY 2021

Full Stack Developer · E-Agle Trento Racing Team


-  University of Trento (Italy)
- Topics: OS Development (Steering Wheel), C++, QT



EDUCATION

NOV 2022 - *Current* (expected graduation 2025)


PhD student in Computer Science

-  University of Trento (Italy)
- Full PhD Scholarship funded by UniTN and PicsArt AI Research (PAIR)
- Supervisors: Nicu Sebe, Humphrey Shi, Zhangyang (Atlas) Wang
- Topics: Deep Learning, Text-to-Image Generation, Vision-Language Models, Fairness, Safety



SEP 2020 - OCT 2022

MSc in Artificial Intelligence

-  University of Trento (Italy)
- Topics: Computer Vision, Deep Learning
- Thesis title: “*Vision-Language Driven Image Augmentation*”
- Supervisors: Prof. Ioannis Patras and Prof. Nicu Sebe
- Grade: 110/110 cum laude (GPA: 4.0)



MAY 2022 - SEP 2022


Visiting Research Student

-  Queen Mary University of London (UK)
- Topics: Computer Vision, Generative Adversarial Networks, Image Editing
- Supervisor: Prof. Ioannis Patras



SEP 2017 - SEP 2020

BSc in Computer Science

-  University of Trento (Italy)
- Topics: Computer Science, Algorithms, Databases, Networks
- Thesis title: “*Dialog Systems: methodologies to improve FAQ data*”
- Supervisor: Prof. Riccardi Giuseppe
- Grade: 106/110 (GPA: 3.5)



PUBLICATIONS

IEEE/CVF Conference on Computer Vision and Pattern Recognition 2024 (CVPR) • *Highlight Paper*

OpenBias: Open-set Bias Detection in Text-to-Image Generative Models

M. D’Incà, E. Peruzzo, M. Mancini, D. Xu, V. Goel, X. Xu, Z. Wang, H. Shi, N. Sebe

- [\[abstract\]](#), [\[pdf\]](#)

IEEE/CVF Winter Conference on Applications of Computer Vision 2024 (WACV)

Improving Fairness using Vision-Language Driven Image Augmentation

M. D’Incà, C. Tzelepis, I. Patras, N. Sebe

- [\[abstract\]](#), [\[pdf\]](#)

IEEE Access 2023

Unleashing the transferability power of unsupervised pre-training for emotion recognition in masked and unmasked facial images

M. D’Incà, C. Beyan, R. Niewiadomski, S. Barattin, N. Sebe

- [\[abstract\]](#), [\[pdf\]](#)

Transaction on Pattern Analysis and Machine Intelligence (TPAMI) (under submission)

GradBias: Unveiling Word Influence on Bias in Text-to-Image Generative Models

M. D'Incà, E. Peruzzo, M. Mancini, X. Xu, H. Shi, N. Sebe

- [\[abstract\]](#), [\[pdf\]](#)

International Journal of Social Robotics (under submission)

Socially Pertinent Robots in Gerontological Healthcare

X. Alameda-Pineda, A. Addlesee, D. Hernandez Garcia, C. Reinke, S. Arias, F. Arrigoni, A. Auternaud, L. Blavette, C. Beyan, L. Gomez Cámara, O. Cohen, A. Conti, C. Dondrup, Y. Ellinson, F. Ferro, S. Gannot, F. Gras, N. Gunson, R. Horaud, M. D'Incà, I. Kimouche, S. Lemaignan, O. Lemon, C. Liotard, R.

Madhavan, L. Marchionni, M. Moradi, T. Pajdla, M. Pino, M. Polic, M. Py, A. Rado, B. Ren, E. Ricci, A. Rigaud, P. Rota, M. Romeo, N. Sebe, W. Steinska, P. Tandeitnik, F. Tonini, N. Turro, T. Wintz, Y. Yu

- [\[abstract\]](#), [\[pdf\]](#)

RELEVANT SKILLS

Research • As of December 2024, I have published four papers in the field of computer vision and image generation with a focus on fairness. Two of these works leverage Stable Diffusion to enhance classifier fairness or bias detection. Particularly, my latest publication, OpenBias, leverages recent advancements in large language models and vision question answering to detect biases in Text-to-Image generative models (e.g., Stable Diffusion, GANs, etc..) in an open-set fashion, i.e., without requiring a pre-defined list of biases. This enables the finding of novel biases never studied before.

Programming • Throughout my deep learning career, I have sharpened my programming skills in Python and PyTorch, specializing in developing and implementing cutting-edge machine learning research. My educational journey has provided me with experience in a wide range of programming languages and frameworks, including Python, C++, Java, and SQL. I also have expertise in version control systems, such as Git, as well as containerization technologies like Singularity and Docker. Additionally, I am proficient in working with databases and integrating them into machine-learning workflows. During my academic journey, I developed several projects focused on video and image processing, gaining experience in designing and implementing solutions for complex multimedia tasks (e.g., deepfake detection, face recognition, etc..).

EUROPEAN PROJECTS

MAY 2023 - Current

AI4Trust • Trusted information from around the world

- Topics: Video Content Analyses, Deep Learning, Anomaly Detection
- [\[Web Page\]](#)

NOV 2021 - DEC 2023

SPRING • Socially Pertinent Robots in Gerontological Healthcare

- Topics: Robotics, Emotion Detection, Deep Learning
- [\[Web Page\]](#)

ACADEMIC ACTIVITIES

Invited Talks

- [Computer Vision Trento Symposium](#) • *Presentation Speaker* • 2024

Student Supervision

- Currently supervising one MSc Student (LLM for generative AI safety enhancement)
- Supervised one BSc Student (Bias mitigation in generative AI)