Moreno D’Incà

PhD Student, University of Trento

Moreno D’Incà is a Ph.D. student in the Multimedia and Human Understanding Group (MHUG) – University of Trento (Italy), under the supervision of Prof. Nicu Sebe. His research centers on Text-to-Image generative models and Vision-Language models, with a focus on fairness and safety. He is currently an applied scientist intern in the Amazon Alexa team, working on robust language models for local search tasks. He holds a Master’s degree in Artificial Intelligence Systems from the University of Trento (Italy), where he completed his thesis at Queen Mary University of London (UK) during a visiting research period.

EXPERIENCE

JUNE 2025 - *Current*
Applied Scientist Intern · Amazon
📍Los Angeles - California (USA) · On-Site · Full-time
- Supervisors: Alessandro Moschitti
- Topics/Team: Large-Language-Models, Local Search / Amazon Alexa Team

NOV 2022 - MAR 2025
PhD Collaboration · PicsArt AI Research (PAIR)
📍Remote · Trento (Italy)
- 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
Applied Scientist Intern · Vui, Inc
📍Trento (Italy)
- Topics: Machine Learning, Neural Information 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 2026)
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/CVF Conference on Computer Vision and Pattern Recognition 2025 (CVPR)
Classifier-to-Bias: Toward Unsupervised Automatic Bias Detection for Visual Classifiers
Q. Guimard, ***M. D'Incà***, M. Mancini, E. Ricci
- [abstract], [pdf]

Links

Google Scholar
Linkedin
X
GitHub
Website

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
Large 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
CVPR 2025 · Reviewer
ICCV 2025 · Reviewer

Awards

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%

Outstanding reviewer:
- CVPR 2025

PUBLICATIONS

Transaction on Pattern Analysis and Machine Intelligence (T-PAMI)
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]

AAAI/ACM Conference on AI, Ethics and Society (AIES 2025)
Beauty and the Bias: Exploring the Impact of Attractiveness on Multimodal Large Language Models
A. Gulati, ***M. D'Incà***, N. Sebe, B. Lepri, N. Oliver
• [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]

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. Sieinska, P. Tandeitnik, F. Tonini, N. Turro, T. Wintz, Y. Yu*
• [abstract], [pdf]

RELEVANT SKILLS

Research • As of September 2025, Moreno D'Incà has published six papers in the fields of computer vision and image generation, with a particular focus on fairness. Two of these works address fairness and bias detection in classification tasks and in generative models such as Stable Diffusion. Among them, OpenBias leverages recent advances in large language models and visual question answering to detect biases in Text-to-Image generative models (e.g., Stable Diffusion, GANs) in an open-set fashion, i.e., without relying on pre-defined lists of biases. This approach enables the discovery of previously unstudied biases. More recently, he extended this line of research to identify which words in the prompt are most responsible for introducing bias. He is currently exploring pruning-based approaches to improve the safety of vision-language models by identifying and mitigating unsafe parameters.

Programming • Throughout his career, he has improved his coding expertise in Python and PyTorch, with a specialization in developing and implementing advanced machine learning research. His academic and professional journey has also given him experience with a broad range of programming languages and frameworks, including Python, C++, Java, and SQL. He is skilled in version control systems such as Git, containerization technologies like Singularity and Docker, and has proficiency in working with databases and integrating them into machine learning workflows.

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