Alex Costanzino

Curriculum Vitae

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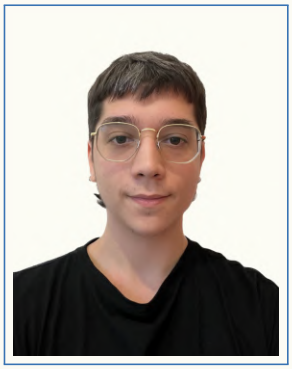

Personal Information

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Google Scholar J_EBAXEAAAAJ

Short Bio & Research Interests

PhD student in Computer Science and Engineering and Teaching Assistant at University of Bologna. My current research activity focuses on Artificial Intelligence and Deep Learning techniques for Computer Vision, in particular for Depth Estimation and Anomaly Detection & Segmentation.

Education

2022 - ongoing **PhD in Computer Science and Engineering**
at University of Bologna.

2020 - 2022 **Master's Degree in Artificial Intelligence**
at University of Bologna,
with a final mark of 110L/110.
Master Thesis *Mitigating non-Lambertian surfaces issues in Stereo Matching with Neural Radiance Fields.* [https://amslaurea.unibo.it/26933/]

2017 - 2020 **Bachelor's Degree in Automation Engineering**
at University of Bologna,
with a final mark of 104/110.
Bachelor Thesis *Machine learning. Principi teorici e applicazioni.*

2012 - 2017 **High School Diploma in Automation**
at IIS Alessandro Volta, Sassuolo (MO), Italy,
with a final mark of 100/100.
Winner of XXXI edition of Lucchese Prize.

Relevant Work Experience

2022 - 2022 **Research Internship for Master Thesis preparation**
at Computer Vision LAB, University of Bologna.

2021 - 2022 **AI Software Analyst & Developer**
at HPE Coxa srl, Modena (MO), Italy.

2019 - 2020 **Student Collaboration Activities**
at Laboratorio di Automazione e Robotica, University of Bologna.

Teaching Activities

2022 - ongoing **Teaching Assistant**
at University of Bologna.
Teaching Assistant of the *Computer Vision and Image Processing* course for the Master's Degrees in Computer Engineering, Automation Engineering and Electronic Engineering.

2024 - ongoing **Teaching Assistant**
at University of Bologna.
Teaching Assistant of the *Image Processing and Computer Vision* course for the Master's Degrees in Artificial Intelligence.

Co-supervised Students

Aiezzo, Agostino — *Test Time Adaptation with SAM features for 2D Anomaly Detection*, University of Bologna, Master's Degree in Artificial Intelligence [LM-DM270]

Mancini, Letizia — *Instance Segmentation of Non-Lambertian objects*, University of Bologna, Master's Degree in Computer Engineering [LM-DM270]

Del Moro, Mirko — *A Test Time Adaptation Protocol to improve Industrial Anomaly Detection and Segmentation*, University of Bologna, Master's Degree in Artificial Intelligence [LM-DM270]

Caltabiano, Sofia — Creation of a dataset for Instance Segmentation of Transparent and Mirror surfaces, University of Bologna, Internship in Automation Engineering [LM-DM270]

Lo Russo, Andrea — *Reti neurali monoculari per la stima della profondità di superfici non-Lambertiane*, University of Bologna, Master's Degree in Computer Engineering [LM-DM270]

List of Publications

2024 **Alex Costanzino**, Pierluigi Zama Ramirez, Giuseppe Lisanti, Luigi Di Stefano *Multimodal Industrial Anomaly Detection by Crossmodal Feature Mapping.* [Accepted at CVPR 2024]

2023 **Alex Costanzino**, Pierluigi Zama Ramirez, Matteo Poggi, Fabio Tosi, Stefano Mattoccia, Luigi Di Stefano *Learning Depth Estimation for Transparent and Mirror Surfaces.* [Accepted at ICCV 2023]

2023 Pierluigi Zama Ramirez, Fabio Tosi, Luigi Di Stefano, Radu Timofte, **Alex Costanzino**, Matteo Poggi, Samuele Salti, Stefano Mattoccia et al. *NTIRE 2023 Challenge on HR Depth from Images of Specular and Transparent Surfaces.* [Accepted at CVPR 2023 Workshops]

2023 Pierluigi Zama Ramirez, **Alex Costanzino**, Fabio Tosi, Matteo Poggi, Samuele Salti, Stefano Mattoccia, Luigi Di Stefano. *Booster: a Benchmark for Depth from Images of Specular and Transparent Surfaces.* [Accepted at IEEE Transactions on Pattern Analysis and Machine Intelligence]

Organization of Workshops & Tutorials

Workshops

[W1] *TRICKY 2024: 2nd Transparent & Reflective objects In the wild Challenges*, **submitted at ECCV 2024** (Milan, Italy)

[W2] *NTIRE 2024: 9th New Trends in Image Restoration and Enhancement Workshop and Challenges*, **CVPR 2024** (Seattle, Washington)
[https://cvlab-unibo.github.io/booster-web/ntire24]

[W3] *NTIRE 2023: 8th New Trends in Image Restoration and Enhancement Workshop and Challenges*, **CVPR 2023** (Vancouver, Canada)
[https://cvlab-unibo.github.io/booster-web/ntire]