Alessandro Simoni, Ph.D.

Deep Learning & Computer Vision Engineer

Links: 🔏 alexj94.github.io | 🛅 LinkedIn | 🖸 GitHub | 🕿 Google Scholar

Summary

I am a dedicated Deep Learning and Computer Vision Engineer. I got my Ph.D. from the University of Modena and Reggio Emilia in April 2024. With experience in 3D Human-Centric Scene Understanding and 3D Object Reconstruction, I have a strong passion for research and advancing the field of Deep Learning.

Work Experience

Covision Lab April 2024 – (Now) Deep Learning & Computer Vision Engineer Brixen, Italy May 2020 - April 2024

AlmageLab (University of Modena and Reggio Emilia)

Research Fellow / PhD Student Modena, Italy

Education

University of Modena and Reggio Emilia

November 2020 - April 2024

Ph.D. in Deep Learning and Computer Vision

Modena, Italy

- Thesis: From Images to 3D Space: The Role of Semantic Keypoints for 3D Perception
- Activities: 3D Object Reconstruction (neural rendering, NeRF), 3D Skeleton Pose Estimation

University of Modena and Reggio Emilia

September 2017 - February 2020

MSc in Computer Science

Modena, Italy

Relevant Publications (* = equal contribution, full list on Google Scholar)

3D Pose Nowcasting: Forecast the future to improve the present A. Simoni*, F. Marchetti*, G. Borghi, F. Becattini, L. Seidenari, R. Vezzani, A. Del Bimbo	2024 CVIU
KRONC: Keypoint-based Robust Camera Optimization for 3D Car Reconstruction D. Di Nucci*, A. Simoni*, M. Tomei, L. Ciuffreda, R. Vezzani, R. Cucchiara	2024 ECCVW
Depth-based 3D human pose pose refinement: evaluating the refinet framework A. D'Eusanio, A. Simoni, S. Pini, G. Borghi, R. Vezzani, R. Cucchiara	2023 PRL
Semi-perspective decoupled heatmaps for 3D robot pose estimation from depth maps A. Simoni, S. Pini, G. Borghi, R. Vezzani	2022 IROS + RA-L
Multi-category mesh reconstruction from image collections A. Simoni*, S. Pini*, R. Vezzani, R. Cucchiara	2021 3DV
Future urban scene generation through vehicle synthesis A. Simoni, L. Bergamini, A. Palazzi, S. Calderara, R. Cucchiara	2021 ICPR

Certifications

First Certificate in English (FCE)

December 2020

Skills

Spoken languages: Italian (mothertongue), English (C1 certified) Programming languages: Python (proficiency), C/C++ (basic)

Libraries & Tools: PyTorch, OpenCV, Numpy, TensorRT, VSCode, PyCharm