LORENZO MAURO

Curriculum Vitae

Date of birth: September 27th 1993, Rome

+39 3924879088

lorenzo.lomar.mauro@gmail.com

linkedin.com/in/lorenzo-mauro

https://github.com/LorenzoMauro/Vortex

phd.uniroma1.it/web/LORENZO-MAURO_nP1529128_IT.aspx

artstation.com/lomar

PROFESSIONAL EXPERIENCE

11/2019 - Present **La Sapienza**
Ph.D. Student in Computer Science *(3rd year)*
Thesis: "Physically based rendering Neural Path Guiding."
Vortex Renderer: GPU Physically Based Renderer developed during the PhD Thesis. (Demo Video).

11/2020-03/2023 **One Pixel Brush**
Concept Designer (Hard Surface/Environment).

01/2018-12/2021 **La Sapienza - DIAG - Alcor Lab**
Deep Learning and Computer Vision Researcher

- **Research Fellow** at Alcor Lab *January 2018 - December 2020*
  - Researching human activity recognition with deep learning techniques for video analysis.
  - Researcher on the European Project H2020 "SecondHands," targeting the realization of an autonomous humanoid robot designed to provide proactive help to maintenance technicians.
- **Teaching Assistant**
  - AI elective Courses - Master's Degree in Artificial Intelligence and Robotics. *(2018/2019/2020)*
  - Computer Science Fundamentals - Bachelor's Degree in Computer Science Engineering. *(2021)*

08/2020-11/2020 **Intesa San Paolo - Big Data Lab**
AI and Deep Learning Consultant researching a Framework for information extraction from news via Natural language Processing and Deep Learning techniques.

EDUCATION

05/2020-07/2020 **Pi-School, School of AI**

2015/2017 **Master's Degree in Artificial Intelligence and Robotics,** University of Rome La Sapienza
Final Grade: 110/110

2012-2015 **Bachelor's Degree in Aerospace Engineering,** University of Rome La Sapienza
Final Grade: 100/110

2007 - 2012 **Aviation Technical Expert High School Diploma,** QEQ ITAER "F. De Pinedo", Rome (Italy)

SKILLS

Programming C++, C, CUDA, Optix SDK, MDL SDK, Python, Matlab.

3D Modelling CAD (Autodesk Fusion360, Moi3d), Blender (Modelling/Rendering), Zbrush

PUBLICATIONS

Girardi M. et al. (2021). The effects of sinusoidal linear drifts on the estimation of cardiorespiratory dynamic parameters during sinusoidal workload forcing: a simulation study. Respiratory Physiology & Neurobiology. 289. 10.1016/j.resp.2021.103652.

Alati E. et al. (2020). Anticipating Next Goal for Robot Plan Prediction. 10.1007/978-3-030-29516-5_60.

Alati E. et al. (2019). Help by Predicting What to Do. 1930-1934. 10.1109/ICIP.2019.8803155.

Mauro L. et al. (2019). Deep Execution Monitor for Robot Assistive Tasks: Munich, Germany, September 8-14, 2018, Proceedings, Part VI. 10.1007/978-3-030-11024-6_11.

Ntouskos V. et al. (2018). Visual search and recognition for robot task execution and monitoring. Applications of Intelligent Systems, vol. 310, pp. 94-109. IOS Press, 2018.