

# Luca Morreale



## Contact

London, United Kingdom

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## Languages

Italian, English

## Programming

Python, C, C++  
LaTeX  
Pytorch

## Links

[Website](#)  
[Github](#)  
[Scholar](#)

## Research interest

I am a PhD candidate working at the intersection of computer graphics, geometry processing and machine learning. My main interests lie in surface representation for artistic content generation and manipulation.

## Education

2019-Now

### PhD in Computer Science

University College London (UCL), expected graduation Dec. 2023

Advisor: [Niloy J. Mitra](#)

2015-2017

### MSc. in Computer Science and Engineering

Politecnico di Milano, Milan, Italy

2012-2015

### BSc. in Computer Science and Engineering

Politecnico di Milano, Milan, Italy

## Experience

2023 June-Nov.

### Research Internship at Meta Reality Labs

Scene geometry manipulation through text prompts, supervised by Vasileios Balntas.

2021 June-Aug.

### Research Internship at Adobe Research

Convolutional surface representation for geometry manipulation and deformation under the supervision of Paul Guerrero.

2019 April-Sept.

### Research Assistant at Università della Svizzera Italiana

Point cloud convolution for classification and correspondence under the supervision of Michael Bronstein.

2018-2019

### Research Assistant at Politecnico di Milano

Real-time point cloud semantic simplification for 3D scene reconstruction under supervision of Matteo Matteucci.

## Publications

### Neural Semantic Surface Maps

Morreale L., Aigerman N., Kim V. G., Mitra N. J.  
preprint 2023

### Neural Convolutional Surfaces

Morreale L., Aigerman N., Guerrero P., Kim V. G., Mitra N. J.  
Computer Vision and Pattern Recognition (CVPR) 2022

Poster

### Neural Surface Maps

Morreale L., Aigerman N., Kim V. G., Mitra N. J.  
Computer Vision and Pattern Recognition (CVPR) 2021

Poster

### Dense 3D Visual Mapping via Semantic Simplification

Morreale L., Romanoni A., Matteucci M.  
International Conference on Robotics and Automation (ICRA) 2019

Poster

### Predicting the Next Best View for 3D Mesh Refinement

Morreale L., Romanoni A., Matteucci M.  
International Conference on Intelligent Autonomous Systems (IAS-15) 2018

Oral

## Patents

2023

### **Neural network based 3d object surface mapping**

V. Kim, N. Aigerman, N. J. Mitra, L. Morreale

## Awards

2022

### **Rabin Ezra scholarship**

The Rabin Ezra Scholarship Trust has been set up with the purpose of making available bursaries for post-graduate students specializing in computer graphics.

## Teaching

2022-Now

### **Teaching Assistant for Acquisition and Processing of 3D Geometry**

University College London

2020-Now

### **Teaching Assistant for Machine Learning for Visual Computing**

University College London

2018

### **Teaching Assistant for Computer Science 101**

Politecnico di Milano, Milan, Italy