

# Sergio Moreschini



11/06/1989



Italian



moreschini.sergio@icloud.com



Tampere, Finland



WebPage

+358 40 1612494

#### **Current Status**

Doctoral Student: Applications of MLOPS in the Cognitive Cloud Continuum

2021 - Expected graduation time: 06.23

Researcher: Extended Light Field representation for continuous parallax content @CIVIT

2021 - present

# Education PhD.

# DOCTORAL RESEARCHER ON COMMUNICATION AND INFORMATION TECHNOLOGIES

Tampere University (TAU), Finland - 2016 - Present

#### Master Degree

## **COMMUNICATION AND INFORMATION TECHNOLOGIES**

Università degli Studi Roma Tre, Italy - 2013-2016 - link to the thesis grade 110/110 cum Laude

#### **Bachelor Degree**

#### **ELECTRONIC ENGINEERING**

Università degli Studi Roma Tre, Italy - 2008-2012 grade 90/110

#### Selected **Publications**

- E. Belyaev, S. Moreschini, and A. Vinel, "Uncoordinated multi-user video streaming in VANETs using Skype," IEEE 22nd Int. Work. on Comp. Aided Mod. and Des. of Comm. Links and Net. (CAMAD), pp. 1-3, June 2017.
- S. Moreschini, G. Scrofani, R. Bregovic, G. Saavedra, and A. Gotchev, "Continuous Refocusing for Integral Microscopy with Fourier Plane Recording". Euro. Signal Process. Conf, (EUSIPCO), pp. 216-220, Sept. 2018.
- S. Moreschini, R. Bregovic and A. Gotchev, "Shearlet-based light field reconstruction of scenes with non-Lambertian properties". 8-th European Workshop on Visual Information Processing, (EUVIP), Oct. 2019.
- F. Lomio, D. M. Baselga, S. Moreschini, H. Huttunen and D. Taibi, "RARE: A Labeled Dataset for Cloud-Native Memory Anomalies". MaLTeSQuE 2020.
- V. Lenarduzzi, F. Lomio, S. Moreschini, D. Taibi, and D. A. Tamburri. "Software Quality for AI: Where we are now?" SWQD2020.
- X. Li, S. Moreschini, Z. Zhang, and D. Taibi. "Exploring factors and measures to select open source software.", 2021.
- F. Lomio, S. Moreschini and V. Lenarduzzi, "Fault Prediction based on Software Metrics and SonarQube Rules. Machine or Deep Learning?", 2021
- N. Saarimaki, S. Moreschini, F. Lomio, R. Peñaloza, V. Lenarduzzi, "Towards a Robust Approach to Analyze Time-Dependent Data in Software Engineering", 2021
- X. Li, S. Moreschini, F. Pecorelli, D. Taibi, "OSSARA: Abandonment Risk Assessment for Embedded Open Source Components", 2022
- S. Moreschini, F. Lomio, D. Hästbacka, D.Taibi, "MLOps for evolvable Al intensive software systems" 2022
- F. Lomio, S. Moreschini, X.Li, V. Lenarduzzi, "Anomaly Detection in Cloud-Native Systems", 2022

#### **Experience**

#ETN-FPI

#CloudSea

#3DMediaGroup #CIVIT Researcher, 3D Media Group, Tampere University.

Methods for capturing, processing and display 3D visual data. Related projects:

- Capture: rig-mounted single/multi camera capture for LF content creation; 360-degree cameras capture, livestream and content creation.
- Analysis: Shearlet-based LF reconstruction of scenes with non-Lambertian properties, fusion of multi-camera-based LF.
- *Visualization*: LF visualization for multiview display; 360-degree camera reproduction on head mounted devices.
- Machine Learning: Volumetric segmentation for integral microscopy with Fourier plane recording.

#SoftwareEngineering

Research experience, CloudSea.ai, Tampere University.

Application of ML-based analysis. Related projects:

- Time-Series Analysis: Analysis of Time-Dependent data in SE.
- Software Quality: Fault prediction, Data-driven software engineering: Open Source Assessment and Overview of the data-driven process.
- Network Analysis: Smart allocation of computation on EDGE devices.
- MLOps: Applications of MLOps

## **Training and courses**

#### **Trainings and courses:**

- Training school on 3D displays and the human visual system;
- Training school on optical foundations of full-parallax imaging;
- Workshop on multi-camera image processing for media production;
- 3D and Virtual Reality;
- Advanced Image Processing (Teaching Assistant);
- Computer vision: 3D scene reconstruction;
- Training school on plenoptic sensing;
- Signal compression;
- Workshop on visual data capture;
- Training school on LF data representation, interpretation and compression;
- Workshop in Media Production;
- Training school on researcher development.

Software	Fields of Interest		Languages
MATLAB	Plenoptic	Italian	Native
Python	Frame Theory	English	Full working proficiency
Pytorch	Light Field	Spanish	Limited working proficiency
Tensorflow	DevOps	French	Elementary proficiency
Linux	Machine Learning		
Blender	MLOps		
OFFICE	Software Quality		

#### Reference

Prof. Davide Taibi

davide.taibi@tuni.fi

Group Leader "CloudSea.Al"

Tampere University, Finland