

RAPHAEL SULZER



CONTACT

✉ raphaelsulzer@gmx.de

🏠 raphaelsulzer.de

📍 Nice, France

🌐 LinkedIn

🐙 GitHub

👤 Google Scholar

SKILLS

Programming

Python

C++

LaTeX

C#

HTML/CSS

JavaScript

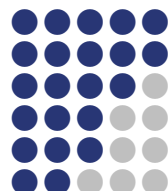
Languages

German

English

French

Dutch



Native

Fluent

Conversational

Beginner

Other

pytorch

CGAL

GitHub

GIS

mesh

photogrammetry

conda

unix

matplotlib

deep learning

point cloud

computer vision

Blender

geometry processing

EXPERIENCE

RESEARCH ENGINEER

📅 11/2023 - Present

📍 LUXCARTA, MOUANS-SARTOUX, FRANCE

Developing an algorithm for country-wide 3D building model reconstruction from airborne LiDAR data.

POSTDOCTORAL RESEARCHER

📅 11/2022 - Present

📍 TITANE, INRIA, SOPHIA-ANTIPOLIS, FRANCE

Carrying out research in geometry processing, computer vision and deep learning.

PHD RESEARCHER

📅 12/2018 - 10/2022

📍 LASTIG, INSTITUT GÉOGRAPHIQUE NATIONAL, PARIS, FRANCE

📍 IMAGINE, ÉCOLE DES PONTS PARISTECH, MARNE-LA-VALLÉE, FRANCE

Carrying out research in geometry processing, computer vision and deep learning.

LECTURER

📅 12/2018 - 12/2019

📍 ÉCOLE NATIONALE DES SCIENCES GÉOGRAPHIQUES, PARIS, FRANCE

Designing and implementing e-learning courses in photogrammetry and GIS.

GIS DEVELOPER

📅 05/2018 - 07/2019

📍 GEO-COL GIS AND COLLABORATIVE PLANNING, AMSTERDAM, NETHERLANDS

Designing and implementing GIS applications for public and private customers.

GRADUATE STUDENT INTERN

📅 06/2017 - 02/2018

📍 ARUP, AMSTERDAM, NETHERLANDS

Developing an algorithm for building classification from remote sensing and cadastral data.

EDUCATION

PHD DEGREE, DEEP LEARNING AND GEOMETRY PROCESSING

📅 12/2018 - 10/2022

📍 GUSTAVE EIFFEL UNIVERSITY, MARNE-LA-VALLÉE, FRANCE

PhD Thesis: Learning Surface Reconstruction from Point Clouds in the Wild ([link](#))

MASTER'S DEGREE, MSC GEOMATICS, CUM LAUDE

📅 08/2016 - 05/2018

📍 DELFT UNIVERSITY OF TECHNOLOGY, DELFT, NETHERLANDS

Master's Thesis: Shape Based Classification of Seismic Building Structural Types ([link](#))

ERASMUS EXCHANGE SEMESTER

📅 08/2015 - 06/2016

📍 DELFT UNIVERSITY OF TECHNOLOGY, DELFT, NETHERLANDS

MSC GEODESY AND GEOINFORMATICS

📅 05/2015 - 01/2016

📍 UNIVERSITY OF STUTTGART, STUTTGART, GERMANY

BACHELOR'S DEGREE, BSC GEODESY AND GEOINFORMATICS

📅 10/2011 - 05/2015

📍 UNIVERSITY OF STUTTGART, STUTTGART, GERMANY

Bachelor's Thesis: Photogrammetric Measurement of Snow Depth Using an UAV Platform ([link](#))

REFERENCES


Florent LAFARGE

 florent.lafarge@inria.fr


 TITANE, INRIA

 Postdoctoral advisor

Loïc LANDRIEU

 loic.landrieu@enpc.fr



 IMAGINE, ÉCOLE DES PONTS PARISTECH

 Doctoral advisor

PUBLICATIONS

Concise Plane Arrangements for Low-Poly Surface and Volume Modelling

 R. Sulzer, F. Lafarge

 2024  European Conference on Computer Vision

 [arXiv](#)


SimpliCity: Reconstructing Buildings with Simple Regularized 3D Models



 J.-P. Bauchet, R. Sulzer, F. Lafarge, Y. Tarabalka

 2024  CVPR Workshop on Urban Scene Modeling

 [arXiv](#)

Evaluating Surface Mesh Reconstruction Using Real Data

 Y. Marchand, L. Caraffa, R. Sulzer, E. Clédat, B. Vallet

 2023  Photogrammetric Engineering & Remote Sensing Journal, Volume 89, Number 10

 [link](#)

A Survey and Benchmark of Automatic Surface Reconstruction from Point Clouds



 R. Sulzer, L. Landrieu, R. Marlet, B. Vallet

 2023  arXiv preprint

 [arXiv](#)

Deep Surface Reconstruction from Point Clouds with Visibility Information



 R. Sulzer, L. Landrieu, A. Boulch, R. Marlet, B. Vallet

 2022  26th International Conference on Pattern Recognition (ICPR), Montréal, Québec

 [arXiv](#)


Scalable Surface Reconstruction with Delaunay-Graph Neural Networks



 R. Sulzer, L. Landrieu, R. Marlet, B. Vallet

 2021  Computer Graphics Forum, Wiley, 2021, Eurographics Symposium on Geometry Processing 2021

 [arXiv](#)

Shape Based Classification of Seismic Building Structural Types

 R. Sulzer, P. Nourian, M. Palmieri, J. van Gemert

 2018  International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences, 2018

 [link](#)

Track-id: Activity Determination based on Wi-Fi Monitoring

 van der Spek, S., Verbree, E., Quak, W., Groeneveld, I. J. D. G., Sulzer, R., Theocharous, E., Xu, Y.

 2016  Proceedings of the 13th International Conference on Location Based Services: LBS 2016

 [link](#)