RAPHAEL SULZER

CONTACT

- ✉ raphaelsulzer@gmx.de
- 📍 Nice, France
- 🏠 raphaelsulzer.de

- in LinkedIn
- ◯ GitHub
- 🎓 Google Scholar
- R⁶ ResearchGate

SKILLS

Programming

Python	●●●●●
C++	●●●●●
CMake	●●●○○
LaTeX	●●●●○
C#	●●●○○
HTML/CSS	●●●○○
JavaScript	●●○○○

Languages

German	*Native*
English	*Fluent*
French	*Conversational*
Dutch	*Beginner*

Other

pytorch   CGAL   GitHub   GIS
surface 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 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 CANDIDATE
- 📅 12/2018 - 10/2022
- 📍 LASTIG, INSTITUT GÉOGRAPHIQUE NATIONAL, PARIS, FRANCE
- 📍 IMAGINE, ÉCOLE DES PONTS PARISTECH, MARNE-LA-VALLEÉE, 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.

GRADUATE STUDENT INTERN
- 📅 06/2017 - 02/2018
- 📍 ARUP, AMSTERDAM, NETHERLANDS

Working on master's thesis in GIS team.

🎓 EDUCATION

PHD, DOCTOR OF PHILOSOPHY
- 📅 12/2018 - 10/2022
- 📍 GUSTAVE EIFFEL UNIVERSITY, MARNE-LA-VALLEÉE, 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

Loïc LANDRIEU

📍 LASTIG, INSTITUT GÉOGRAPHIQUE NATIONAL

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Renaud MARLET

📍 IMAGINE, ÉCOLE DES PONTS PARISTECH

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📄 PUBLICATIONS

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

Concise Plane Arrangements for Low-Poly Surface and Volume Modelling
👥 **R. Sulzer**, F. Lafarge

📅 2024   📘 arXiv preprint   🔗 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