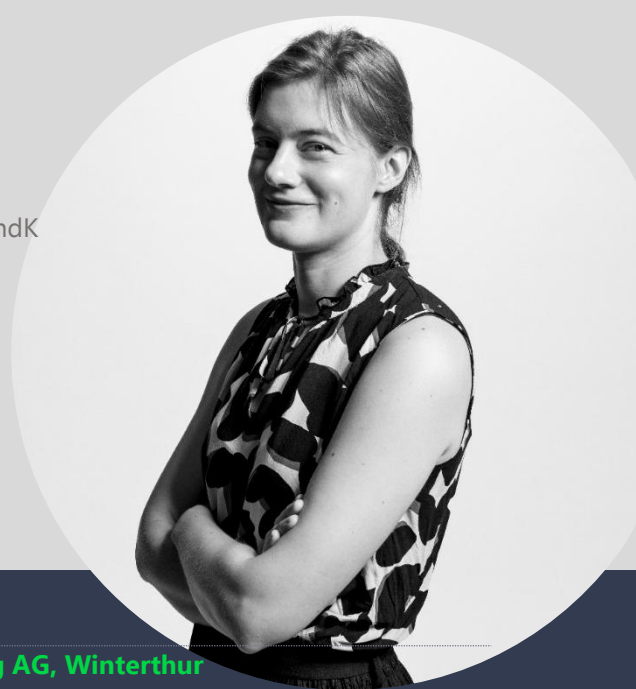


Francine Rotzetter.

Master of Advanced Studies (MAS) in Computer Science ZHAW
Master of Arts ZFH in Design with a Specialization in Game Design ZhdK
Master of Science ETH Zurich in Architecture

Software Engineer with a focus on 3D spatial data processing,
real-time visualization systems, and geospatial web applications.



Portfolio: <https://francinerotzetter.com>

EXPERIENCE

2024 - current
02/2024 – current

Software Engineer at Noser Engineering AG, Winterthur

- Development of enterprise applications using C# / .NET
- Frontend development with Angular, TypeScript, Tailwind CSS
- Integration of Esri ArcGIS JavaScript API for geospatial web visualization
- Design of UI systems for data-intensive and spatially structured applications
- Requirements engineering with stakeholders (technical + business)
- CI/CD pipelines with Azure DevOps and automated deployments
- API integration and system orchestration (REST-based services)
- AI-supported frontend architecture and reactive state patterns

C# | .NET | Angular | TypeScript | JavaScript | ArcGIS API | Docker | Azure DevOps | Git, PostgreSQL

2022 - 2023
09/2022 – 11/2023

Engineering manager, real-time visualization Tend AG, Zurich

September 2022: Fusion of Raumgleiter AG and Tend AG

- Led 11 developers and artists in real-time 3D visualization projects
- Product responsibility for spatial visualization solutions (real estate domain)
- Market and user requirements analysis → product definition
- Cross-functional coordination between engineering, design, and business

Unreal Engine 4/5 | Blender | C++ | Perforce

2018 - 2022
01/2018 – 09/2022

Real-time Director and Managing Partner at Raumgleiter AG, Zurich

- Led development of real-time 3D visualization and interactive systems
- Managed engineering teams (6+ members) across VR / XR projects
- Delivered spatial visualization solutions for enterprise clients
- Oversaw project budgets up to CHF 400k and client communication
- Responsible for product direction and technical delivery

Unreal Engine 4 | Unity, C++ | Blender | Git

EDUCATION

2026
02/2026

MAS Computer Science at ZHAW, Zurich

Master thesis: Geospatial 3D reconstruction pipeline using smartphone-based LiDAR and photogrammetry fusion

- **Point cloud processing and spatial data pipelines**
- **ICP-based registration and alignment methods**
- **Sensor fusion (LiDAR + image data)**
- **3D geometry and coordinate systems**
- **Accuracy modeling (RMSE, uncertainty analysis)**
- **Large-scale spatial data processing**

CloudCompare | Open3D | Point Cloud Library | OpenCV | Jupyter Notebook | Python (analysis & prototyping)

2024 - 2026
02/2024 – 02/2026

CAS OOP, CAS Computer Science 1 & 2, CAS Software Engineering at ZHAW, Zurich

- Software Engineering Fundamentals
- Algorithms & Data Structures
- Distributed Systems Basics
- Systems Programming (Python/ C++)
- OS & Networking Concepts

2016 - 2017
02/2016 – 06/2017

Master of Arts ZFH in Design with a Specialization in Interaction Design (core subject Game Design) at ZHdK, Zurich

Master thesis : "Game Guidance - Leitsysteme in Open-World Games"

Supervisors : Beat Suter, Mela Kocher, René Bauer

Highlighted in ZHdK "Highlights" and published in two publications:

- **Games and Rules: Game Mechanics for "The Magic Circle"**
Beat Suter / Mela Kocher / René Bauer (eds.) (2018)
- **Architectonics of Game Spaces: The Spatial Logic of the Virtual and its Meaning for the Real**
Andri Gerber / Ulrich Götze (eds.) (2019)

Game Design | Spatial Design | Interaction Design | Narrative Systems | Level Design Fundamentals | Unreal Engine 4 | Unreal Visual Scripting | Blender

2014 - 2015
08/2014 – 08/2015

Master of Science ETH in Architecture at ETH Zurich, Zurich

Computational design, parametric modeling, and simulation-based architectural systems

PROFESSIONAL SKILLS AND COMPETENCES

CORE SKILLS

3D Spatial Data Processing :

Point Clouds | LiDAR Processing | Photogrammetry
| Sensor Fusion | ICP Registration | 3D
Reconstruction

Geospatial & Visualization Systems :

Spatial Data Visualization | Geospatial Web
Applications | Coordinate Systems | Data-driven
Mapping Interfaces

Software Engineering :

C# / .NET | System Design | API Integration | REST
Services | Agile Development | CI/CD

Real-time Systems :

Unreal Engine | Unity | Real-time Visualization |
Interactive 3D Systems

TECH STACK

C# | .NET | Python | C++ | TypeScript | JavaScript |
Angular | ArcGIS API | OpenCV | PCL | Open3D |
Docker | Azure DevOps | Git | Unreal Engine | Unity

CERTIFICATES

iSAQB® CPSA Foundation Level | Professional
Scrum Master I (PSM I) | Educational Leadership
Zertifizierung

SOFT SKILLS

Clear communication in interdisciplinary teams |
Structured planning under tight deadlines |
Collaborative problem-solving in agile
environments |
Adaptability in cross-domain engineering projects

LANGUAGES

German – Native | English – Fluent | French – Basic communication