Jonathan Giezendanner

Dr. Ing. Env. EPFL

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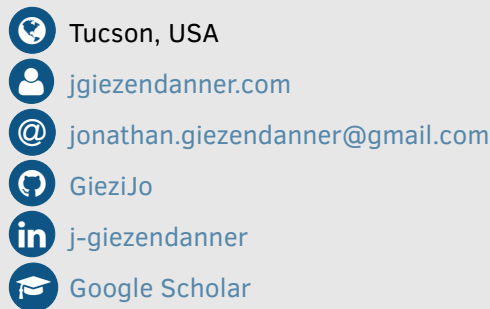- j-giezendanner
- Google Scholar

Languages

French: Native language
German: Second native language
English: Fluent
Italian: Basic knowledge

Skills

Machine Learning, Mathematical Modeling, Data Analysis and Sciences, Programming, Optimisation, Calibration

Computer Skills

Languages: Python, R, C#, Java, SQL
WebDev: HTML, CSS, JS
DevOps: Docker, HPC
GIS: QGIS, Google Earth Engine, PostGIS (PostgreSQL)
Others: GIT, Unity3D, Latex, Linux, Windows

Soft Skills

Working in different environments has given me the ability to adapt quickly to new situations, become a good team-player, understand project management and develop strong skills in communication with partners and colleagues. Additionally I'm a fast thinker, rapidly able to connect the dots, always curious about new things, driven. Humour is very important to me and often works well with other people.

Interests

Cycling, ski-touring, mountaineering, cooking, gaming, game development, board games, music, films, books, concerts, coffee, beers

Experience

Since 2021 — Postdoctoral Researcher — University of Arizona (UA), Tucson, USA
At the Social Pixel Lab led by Prof. E. Tellman Sullivan, Involved in multiple projects regarding flood monitoring and mapping using remote sensing and machine learning

Since 2020 — Co-founder and developer — Early Coffee Games
Swiss indie games studio focused on developing *Hermit - an underwater tale*, granted with a Pro Helvetia pre-production grant (2020), Game Developers Conference 2022 Delegation Selection, and Pro Helvetia production grant (2022).

2021 — Research Scientist — University of Bern (U^b), Bern, Switzerland
Short term work for modeling of an urban watershed situated in the North of Berlin.

2020 — Postdoctoral Researcher — Swiss Federal Institute of Technology (EPFL), ECHO, Lausanne
At the Laboratory of Ecohydrology (ECHO), led by Prof. A. Rinaldo

2016-19 — Ph.D. in Civil and Environmental Engineering — EPFL, ECHO
Specialised in theoretical ecology, with a focus on metapopulation dynamics of mountain species.
Teaching duties: main teaching assistant for water resources engineering, teaching assistant in probability and statistics

2014-20 — Co-founder and developer — Sharped Stone Studios
Swiss independent game creation collective, involved in multiple projects, game jams and games integrated in modern art exhibitions.

2015 — Computer vision scientist — Insel, Bern
Involved in the development of a tool for automated tumor detection using spectral imaging and machine learning, at the Support Center for Advanced Neuroimaging (SCAN)

2012-15 — Teaching assistant — EPFL
Classes: signals, instruments and systems, numerical analysis, geomatics, analysis II

2013 — Engineering intern — Emch+Berger, Bern
Internship at the engineering office Emch+Berger, in the environmental section. Involved in projects regarding water flow management in urban environment

2011 — Research assistant — SHL, Bern
Assistance in the development of BioChar, at the Swiss Applied University for Agriculture (SHL)"

2009 — Caregiver intern — Regional hospital, Moutier
Internship as caregiver at the regional hospital of Moutier

2008-09 — Military service — Swiss armed forces, Airolo
Military service as medic, graduated with the rank of sergeant (group leader)

Education

2013-15 — Msc Environmental Sciences and Engineering — EPFL
Minor in Computational Sciences and Engineering
Master thesis: rainfall forecasting in Burkina Faso using Bayesian-Wavelet Neural Networks

2009-13 — Bsc Environmental Sciences and Engineering — EPFL

2005-08 — Bilingual high school (D/F) — Alpenstrassen Gymnasium Biel
Specializing in Economics and Law

Extracurricular activities

2014-17 — Organisation of the Balélec Festival (15'000 People) on EPFL campus: chief financial officer (2016), internal catering manager (2015), electricity- and water-supply manager (2014)

2013-15 — Class representative at EPFL, defending the interests of the students in discussion with the school

2012-14 — Founder and vice-president of the association TREE, meant to favor interactions between students in environmental engineering