
Bastian Eichenberger

Swiss | 24.07.2000 | bastianeichenberger.ch | mail@bastianeichenberger.ch

Motivated data scientist with full-stack experience and expertise in deep learning. Demonstrated success in creating reproducible, cloud-based workflows with CI/CD. Fluent in six languages and earned a Doctor of Philosophy in computational biology at the age of 22.

EXPERIENCE

Artifact, Zurich (CH) | *Data Science Consultant* | 2023 – PRESENT

- Experienced in leveraging bleeding edge generative AI for image and text generation tasks in an agile development environment.
- Long term client engagements to develop machine learning models deployed at scale.

Friedrich Miescher Institute, Basel (CH) | *PhD Candidate* | 2020 – 2023

- Development of deepBlink, a deep learning-based tool for diffraction limited spot-detection. Downloaded well over 20k times and enabling fully automated image analysis workflows.
- Development of eFISHent, a pipeline for RNA in-situ hybridization oligo/probe design.
- Design and development of an automated microfluidics system for sequential FISH.
- Investigation of protein-protein interaction using NLP models.

Instituto Europeo di Oncologia, Milano (IT) | *Software Developer* | 2022 – 2023

- Setup of a workflow for automatic genotyping of cancer patient samples.
- Single cell multiome and image analysis for collaborators from Germany.

Feuerwehr Oberwil, Oberwil (CH) | *Furir Deputy* | 2019 – PRESENT

- Lead the command support unit, overseeing and conducting training sessions.
- Collaborate with the political and financial administration.
- Drive the development and maintenance of the department's website and social media platforms, successfully attracting and engaging an average of 2k monthly visitors.

RKK Oberwil, Oberwil (CH) | *Sacristan* | 2017 – 2021

- Preparation and lecturing during all kinds of masses including funerals, baptisms etc.
- Supervision of around 60 altar servers including home page administration and a monthly work plan.

PUBLICATIONS

- Mateju D, **Eichenberger BT**, Voigt F, Eglinger J, Roth R, Chao JA. Single-molecule imaging reveals translation of mRNAs localized to stress granules. Cell 183 (7), 1801-1812. e13
- **Eichenberger BT***, Zhan YX*, Rempfler M, Giorgetti L, Chao JA. deepBlink: Threshold-independent detection and localization of diffraction-limited spots. Nucleic Acids Research 49 (13), 7292-7297
- **Eichenberger BT***, Griesbach E*, Mitchell J*, Chao JA. A glimpse into the birth, life and death of single mRNAs in cells Annual Review of Cell and Developmental Biology Vol. 39:253-275

EDUCATION

University of Basel (CH) | *PhD in Bioinformatics* | 2020 – 2023

University of Basel (CH) | *MSc in Molecular Biology* | 2018 – 2020

Albert Ludwig University of Freiburg (DE) | *BSc in Biology* | 2015 – 2018

SKILLS

Programming

- Data Science – deep learning (TF2.x, Pytorch, WandB), data visualization, workflow orchestration (Luigi, Prefect, KNIME), SQL.
- Bioinformatics – Python, R, biomedical image analysis, single-cell multiome analysis.
- Web development – React, Tailwind CSS, FastAPI.
- Other – Bash, HPC, Docker, Git, LATEX, Google AppScript, Microelectronics.

Soft skills

- SCRUM
- Teaching/education, phone etiquette, public speaking.

Languages

- Mother tongue – German, English.
- Fluent – Spanish, French, Italian.
- Limited – Norwegian, Chinese, Portuguese.