Jan Nils **Ferner**

SENIOR SOFTWARE ENGINEER · TEAM LEAD · AUTHOR · SCRUM MASTER

Grosswiesenstrasse 153, 8051 Zürich, Schweiz

(+41) 79 963 17 64 | contact@jnferner.com | www.jnferner.com | jnferner | jan-nils-ferner | jnferner

Experience

Messerli Informatik AG
Spreitenbach, Switzerland

SOFTWARE ENGINEER, SCRUM MASTER
September 2014–August 2019

- Heavily involved in the shaping of the company's technical strategy
- Introduced teams to Scrum and worked with them to transform their project management process
- Prepared and conducted presentations for company internal training in topics such as usage of modern C++ and Clean Code along with accompanying articles for the company's internal wiki
- Refactored decades old code to be testable while cleaning up architecture
- Wrote libraries used by new projects with focus on testability, immutability and architecture
- Conducted apprenticeship days
- Setup company-wide continuous integration process

Myelin Research Group
Aarau, Switzerland

CO-FOUNDER, PRODUCT OWNER, RESEARCHER & SOFTWARE ENGINEER
September 2018–September 2019

- Developed new training strategies with the goal of achieving general intelligence
- Implemented 3rd generation neural networks
- Researched new ways of evolving neural network topology through genetics, especially through evolutionary developmental biology
- Combined libraries to a general 2D simulation engine with a clean architecture
- Helped writing a mocking library

Packt Publishing LTD
Remote

AUTHOR OF "THE RUST STANDARD LIBRARY COOKBOOK"
September 2017–April 2018

- Worked out a general outline in collaboration with Packt's content managers
- Researched the various topics referenced in the book
- Wrote reference code designed as "recipes", i.e. general code snippets applicable to many projects
- Elaborated the code in an engaging, easy to read and fun way
- Included background information related to the technology at hand and practical tips related to the topic
- Refined the content of the book in collaboration with editors and technical reviewers

isitvegan.app
Remote

CO-DEVELOPER
May 2019

- User friendly querying of vegan food and additives on desktop and mobile, especially e-numbers
- Live under https://www.isitvegan.app
- Developed with a friend in our spare time
- Automatic data import and analysis from different sources
- Filled in information gaps on Wikipedia

Messerli Informatik AG
Spreitenbach, Switzerland

TEAM LEAD, PRODUCT OWNER
August 2019–September 2019

- Planned and executed the creation of a new updater/installer as well as the server infrastructure for new development
- Led a team of up to seven software developers and designers
- Discussed implications of breaking changes with other team leads
- Documented architecture and workflows of new products

Skills

Programming Languages	Rust, C++, C#, C, Java, TypeScript, JavaScript, Python, F#, SQL, Haskell, bash
Backend	Test-driven Development, Clean Architecture, Clean Code, Neural Networks, Machine Learning
	Functional Programming, Object Oriented Programming, Pair Programming, REST
Frontend	WebAssembly, HTML5, CSS, REST
Databases	MariaDB, MySql, PostgreSQL, Redis, Microsoft Access
DevOps	Continuous Integration, Docker, Sonar, Travis
Tools	Git, GitHub, PowerShell, LaTeX, Unity Engine, Microsoft Office, Microsoft Excel
Operating Systems	Windows, Windows Server, macOS, Debian Linux, Fedora Linux
Scrum	Developer, Product Owner, Scrum Master
Administrative	Team Leadership, Requirement Analysis, Documentation, Work Organization on a Yearly, Monthly and Daily Basis
Languages	German (First language), English (Fluent), French, Spanish

Education

Alte Kantonsschule Aarau   *Aarau, Switzerland*

SWISS GENERAL BACCALAUREATE (VOLUNTARILY PREMATURELY TERMINATED   *August 2013–July 2014*

- Specialization in life sciences and mathematics
- Prematurely Terminated in order to gain private sector know-how)

Messerli Informatik AG & Berufsschulen Berufsbildung Baden   *Spreitenbach & Baden, Switzerland*

SWISS FEDERAL VET DIPLOMA OF COMPUTER SCIENCE IN THE DISCIPLINE OF APPLICATION DEVELOPMENT   *September 2014–September 2018*

- Extracurricular activities: Attended game design course
- Final grade: 5.1 (1 is worst, 6 is best)

Berufsbildung Baden   *Baden, Switzerland*

SWISS FEDERAL VOCATIONAL BACCALAUREATE   *September 2014–September 2018*

- Enlisted in immersion class: Some subjects where in English
- Final grade for subjects: 4.8 (1 is worst, 6 is best)
- Final grade for interdisciplinary project "Image Recognition with Artificial Neural Networks": 5.3 (1 is worst, 6 is best)

AKAD   *Zürich, Switzerland*

PASSERELLE   *August 2019–August 2020*

- Final grade: 28 out of 30 points (Valedictorian)
- This degree guarantees access to all Swiss universities and is generally seen as an equivalent of the Swiss Matura

Publications

Rust Standard Library Cookbook   *Remote*

AUTHOR   *September 2017–April 2018*

- Wrote a book aimed at intermediate Rust developers
- ISBN: 978-1788623926
- Amazon
- Packt Pub

Combining Neuro-Evolution of Augmenting Topologies with Convolutional Neural Networks   *Baden, Switzerland*

RESEARCHER & AUTHOR   *January 2016–January 2017*

- Conducted research on new ways to evolve artificial intelligence for optical recognition
- ResearchGate

Certificates

2014	**ECDL Standard**, ICDL / ECDL	*Aarau, Switzerland*
2014	**ECDL Advanced**, ICDL / ECDL	*Aarau, Switzerland*
2016	**DELF (Diploma in French Language Studies) B1,** International Centre for French Studies	*Lucerne, Switzerland*
2017	**Professional Scrum Master,** Scrum.org & Digicomp Academy AG	*Zurich, Switzerland*
2019	**Azure DevOps Gold Competency Assessment,** Microsoft	*Remote*

References

André Messerli *Ennetbaden, Switzerland*

Executive CEO at Messerli Informatik AG

✉ andre.messerli@messerli.ch

André worked closely with me on the planning of our new products. We formed ideas, discussed them with other team leads, evaluated pros and cons and documented our decisions together. He was a great teacher to me in leadership, decision making and economics. I owe my administrative skills to him.

Thomas Bruderer *Zürich, Switzerland*

CTO at Messerli Informatik AG

✉ ThomasBruderer@gmx.net

Thomas and me were always trying to modernize the company's code, work culture and design philosophy, which lead to us forming a team tasked with the development of new services and rewriting existing products.