

Wrangelstr 3  
10997 Berlin  
Germany

daniel@danielbachler.de  
danielbachler.de  
github.com/danyx23  
+49 176 24 72 60 31

# DANIEL BACHLER

## Software Engineer

Full Stack Developer | Functional Programming Enthusiast | Former Photographer & Film Director

Polyglot software architect and engineer with more than 15 years experience, a majority of them leading a remote team of engineers. Designs and implements highly reliable software solutions that are a joy to use, from polished web or native UIs to high performance data processing backends.

Background in photography and film directing led to strong design, communications and leadership skills. Often finds himself translating between management and engineers. Enjoys learning new things and teaching others. Started two functional programming meetups in Berlin and spoke at several tech conferences and meetups. Fluent in English and German.

Most recently used tech stacks: F#, Elm, Python, Haskell, Docker, Kubernetes, Tensorflow, SQL, GraphQL, GCE, React

Currently learning/using on side projects: Rust, PyTorch

Experience in (not exhaustive): C#, C++, R, Elasticsearch, AWS, Linux system administration

Non-programming skills: Print design (Photoshop, Indesign); Motion Graphics (After Effects); 3D Design

## PROFESSIONAL EXPERIENCE

### **Senior Software Engineer at Douglas Connect GmbH**

04/2016 – current

Introduced modern software engineering practices (Docker, Kubernetes, CI/CD, Jupyter notebooks)

Project: ITS

Together with a data scientist and a UX designer designed and built a Skin Sensitization web application that was a hit at the biggest toxicology conference for it's ease of use and understandable yet in-depth reports. Used R, Python, Elm, Docker, Kubernetes.

Project: INTERVALS

Designed and built a data warehouse for organizing and publishing scientific data for a Fortune 500 company in a team of two. Used Python, GraphQL, Postgres, RabbitMQ

Project: Edelweiss

Designed and build a data backend and interactive web UI for uploading, rich semantic annotation and

filtered retrieval of tabular scientific data. Used F# (both Frontend and Backend), Elasticsearch, Postgres.

## **Lead Software Engineer at H.T.S. GmbH**

02/2008 – 12/2015

Project: Zervice

Lead a team that designed and implemented Zervice from scratch in C#, from conception to the big release and first point update. Zervice is by now the market leader for market research analytics software in Austria and expanding to other countries with an annual revenue of around half a million Euro. Was responsible for hiring and managing the engineering team as well as communication with our Beta testers. Designed the overall architecture of the software and app level UX.

On the engineering side of Zervice, my main responsibilities where the design and implementation of :

- the highly optimized, N-dimensional multithreaded core analytics engine
- a user friendly cost/reach optimization as well as a meta-optimization engine to finetune hyper parameters
- a proprietary algebra to deal with time-of-day response data in an intuitive way
- the graphical formula editor
- high level cryptographic primitives for the licensing and update mechanisms

Project: HTSTools

Internal data cleaning and transformation tool written in C#. Implemented several key algorithms to the specifications of the analysts in the company. Designed and implemented a DSL for complex data transformations. Suggested the benefit of creating a bridge between HTSTools and the statistical computing software R and implemented it to enable R-markdown based workflows for an improved auditing workflow.

## **Software Engineer at the Red Cross**

10/2003 – 10/2004

Created a sophisticated permission system that deals with emergency access to confidential data. A slightly modified version is still in use today. The technology stack was mostly C#, ASP.NET and SQL Server.

## **Independent Side Project: Tuneslides**

12/2015 – 03/2016

Photographic slideshow tool for professional photographers. Editor and Viewer run fully in the browser. The entire application was designed, built and run by me. Frontend built with the compile-to-Javascript, purely functional programming language Elm. Backend is a serverless stack using Javascript running on AWS Lambda exposing a REST Api backed by S3 and Amazon's NoSQL DynamoDB. Project is currently dormant due to lack of time.

## **Iconoclash Photography Website**

2017

Visual design and implementation of a CMS theme for iconoclash-photography.com

# EDUCATION

Film directing (filmArche Berlin 2006–2009)

Journalism & Philosophy (Universtiy of Vienna, 2001–2003)

Software Engineering & Project Management (H.T.L. Spengergasse 1996–2001)

H.T.L. Spengergasse is a kind of special High School with a focus on software engineering, the level of formal IT education is roughly comparable to a BS in CS.. Was trained in C, C++, IBM Mainframe Assembler, Prolog, Cobol, Java, PL/1 as well as project management and accounting/controlling. My finals project was a 3D game engine written in C++.