

# Jan Fornoff | Curriculum Vitae

Amselweg 66 – 64295 Darmstadt

+49 163 4684860 • [✉ janfornoff@gmail.com](mailto:janfornoff@gmail.com) • [🌐 blog.janfornoff.com](https://blog.janfornoff.com)  
[in jan-fornoff](#) • [🌐 jfornoff](#)

## Education

---

### MSc Business Information Systems

TU Darmstadt, Average grade 1.42

2016–2018

Master Thesis: “Evaluating Quality of Experience in Multipath TCP Applications on iOS Mobile Devices” (Graded 1.0)

- o Development of iOS application capable of running web applications over MPTCP
- o Design of network testbed allowing per-path network emulation and using real application from the Internet
- o Conducting a user study while collecting extensive metrics and statistics for analysis

### BSc Business Information Systems

TU Darmstadt, Average grade 2.27

2011–2016

Bachelor Thesis: “Optimization and Evaluation of MPEG DASH Video Streaming by large-scale Network Simulation”

(Graded 1.0 & nominated for the Datenlotsen award for outstanding theses)

### High school graduation (Abitur)

Berufliches Gymnasium Groß-Gerau, Average grade 1.5

2007–2010

Focused on Information Systems / Electrical Engineering, Intensive course: Maths

## Scientific publications

---

### QoE Analysis of DASH Cross-Layer Dependencies by Extensive Network Emulation

Denny Stohr, Alexander Frömmgen, Jan Fornoff et al., ACM SIGCOMM 2016 (Workshop)

### Capture and Replay: Reproducible Network Experiments in Mininet

Alexander Frömmgen, Denny Stohr, Jan Fornoff et al., ACM SIGCOMM 2016 (Poster)

## Experience

---

### Google

Software Engineer – Site Reliability Engineering

Zurich

Sep. 2019–future

### Grandcentrix GmbH

Backend Systems Engineer (Remote)

Cologne

Oct. 2018–Sep. 2019

- o Elixir application development (OTP, Phoenix framework)
- o Extensive use of CQRS / Event Sourcing paradigms
- o Taking part in software architectural discussions
- o Load testing, profiling and fixing performance bottlenecks
- o Diagnosing and troubleshooting failures on live Kubernetes deployment
- o Participating in internal expert communities to advance engineering practices

### Grandcentrix GmbH

Working student Backend Development (Remote)

Cologne

Sep. 2017–Oct. 2018

### Software AG

Working student

Eberstadt

Oct. 2011–Sep. 2017

Development of internal web applications

- o Development of web applications for management of contracts
- o Automation of Non-Disclosure Agreement generation
- o Development of web application for creating dynamically configurable questionnaires
- o Integration with internal data and authentication APIs
- o Conception of a Docker-based deployment and application operation platform
- o Linux system administration, deployment automation & monitoring

## Software AG

*Obligatory internship for course of study*

**Eberstadt**

*Aug. 2011–Oct. 2011*

## Projects

---

### University projects.....

#### Course project “IT project management”

**Invensity GmbH (Wiesbaden)**

Development of single-page application to collect customer feedback (AngularJS 1.x - Frontend, Laravel - Backend)

#### Course project “Creating Value through Data Science”

**Accenture Digital**

Analytics challenge with the goal of getting insights into the profession of Data Scientists.

- o Business case definition
- o Data preparation for analysis
- o Statistical data analysis and modeling
- o Development of prediction model
- o Data visualization
- o Presentation of results in front of experts from science and practice

### Personal side-projects.....

#### Chatbot for asynchronous stand-up meetings

**Meetup-Slides**

Development of Chatbot based on “Slack”, who conducts asynchronous stand-up meetings at user-defined times by direct message and posts the formatted results into a status chat room. (Elixir / OTP)

#### Chefkoch-Shopping

Experimental project to grasp Node.JS principles.

Captures a Chefkoch (cooking recipe site) recipe, crawls it for ingredients and allows adding them to a shopping list.

- o OAuth & REST API integration with Wunderlist
- o Crawling of recipe site for ingredients
- o Docker-based deployment
- o Express.JS on top of Node.JS

**More at <https://blog.janfornoff.com/projects>**

## Languages

---

**English:** fluent (spoken and written)

**German:** Mother tongue level

## Technical skills

---

### Programming languages.....

#### Advanced level:

- Elixir
- Elm
- Python
- Ruby
- HTML / JavaScript

#### Basics:

- Go
- Java
- Scala
- C(++)
- Assembler
- Rust
- Haskell
- R

### Technologies.....

#### Tools:

- Git
- Docker
- Kubernetes
- Rancher
- Gitlab CI

#### Frameworks:

- Phoenix (Elixir)
- Ruby on Rails
- node.js / Express
- Laravel

#### Storage:

- PostgreSQL
- MySQL
- Redis
- RabbitMQ

#### Protocols:

- HTTP-based adaptive bitrate video streaming (MPEG-DASH / HLS)
- Network protocols (HTTP, TCP/IP, Multipath TCP)

## Technical areas of interest

---

- Web Technologies & Future Internet
- System performance optimization (across abstraction boundaries)
- Agile & Test-Driven Development
- Systems engineering & SRE
- Big Data, Data Mining & Statistical Analysis

## Hobbys

---

- Sports
  - Handball
  - Strength training
- Cooking
- Traveling and hiking