

**WORK EXPERIENCE****Software architect and full-stack developer, SNTL-Publishing<sup>1</sup>, Berlin****7.2011-today**

In a small team, I designed and developed the distributed, server-based, gamified learning application yeepa. My tasks include all parts of the software lifecycle, from conceptual development to software development to operation and support.

Technologies: Python 2/3, Tornado, Pyramid, Flask, SQLAlchemy, scipy, pandas, jupyter, Zope, Bokeh, Jinja2, R, nosetests, Selenium/webdriver, JS, jQuery, Backbone, Marionette, Bootstrap, SCSS/SASS, LESS, CSS, HTML5, Ansible, Puppet, nginx, haproxy, Jenkins, Docker, Red Hat/CentOS, MySQL, SQLite, Redis, GIT, Mercurial, SVN.

**Software developer, pharmacy data center****1.2017-4.2018**

Design and provision of a Flask application for pharmacies to quickly control the scanned data of prescriptions and to search through the scanned metadata.

Technologies: Python 3, Flask, Bootstrap, Sass, Json Editor, SQLite, git

**Consulting and Development, Cooperative Partou****10.2015-6.2020**

Consulting and strategy development as well as front-end development of an employee participation platform. In a team of 5 developers, I contributed to adapting the SPA application for the participation platform and making it ready for the market.

Technologies: TypeScript, Angular, SASS/SCSS, CSS, Python 3, Ansible, ZODB

**Software developer, InsideGuidance****7.2011-1.2013**

Development of a JS single page application-based surface without application server, with direct MongoDB connection.

Technologies: CoffeeScript, JS, MongoDB, Ruby, Chef, Ruby, Java, Objective-C

**Software developer, Agile42<sup>2</sup>, Berlin****5.2009-6.2011**

First alone and later in collaboration with three other developers, I further developed the Trac-based project management system "Agilo for Scrum" and later designed and developed the new product "Agilo 2", a desktop-like web application. To do this, I set up and maintained the company's server infrastructure and looked after support and customer training.

Technologies: Trac, Django, JavaScript, jQuery, CentOS, Bitten, SVN

**Software developer, Novamedia<sup>3</sup>, Berlin****10.2007-4.2009**

In collaboration with 20 employees, I have developed programs for synchronizing cell phones and smartphones with the Mac, as well as Internet Connection Manager, both for Vodafone and as a separate product.

Technologies: Objective-C, C/C++, Bluetooth, SyncML, Serial connections, Feature Phones, iPhone

**Computer science tutor, operating systems department<sup>4</sup>, TU-Berlin****5.2004-9.2007**

As a tutor for the basic course in computer science, I taught advanced data structures, algorithms, hardware-related and concurrent programming along with the various synchronization techniques. My responsibilities also included designing homework and exam assignments and correcting the programs created by the students.

Technologies: Java, C, Assembler, Nebenläufigkeit, Algorithmen

**Software developer, DAI-Labor, Berlin****12.2003-11.2004**

In collaboration with about seven other developers, I programmed a development environment for creating agent-oriented software systems.

Technologies: Java, Eclipse, Agent-based systems, RDF, Ontologies, Knowledge Graphs, Regular expressions

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<sup>1</sup> <https://www.sntl-publishing.com>

<sup>2</sup> <http://agile42.com/>

<sup>3</sup> <http://novamedia.de/>

<sup>4</sup> <http://www.kbs.tu-berlin.de>

**3D visualizer, GMD (now Fraunhofer), Bierlinghoven****04.2001-08.2001**

For a GMD project, I worked in a team of four designers to visualize the entire Bonn marketplace, including all market stalls, using an interactive 3D model.

Technologies: SGI, Autodesk Maya, Cave, Cone.

**Community service, Schorndorf****2000-2001**

I did my community service in a workshop for the disabled. Towards the end of my job, I temporarily took on the duties of a group leader.

**EDUCATION****Computer science diploma, TU-Berlin****2001-2007**

With a focus on operating systems and a diploma thesis on the parallel development of technical, legal and social aspects of P2P and file sharing technologies, I completed my studies in 2007 with a diploma. In elective and additional subjects, I also dealt with psychology, philosophy, usability and the construction of refactoring tools.

**Abitur, Winterbach****1986 - 1999**

I did my Abitur at the Free Waldorf School in Engelberg in Baden-Württemberg.

**VOLUNTARY WORK****Chaos Computer Club, Berlin****2002-Heute**

I am an active member of the Chaos Computer Club. I am particularly concerned with maintaining and looking after the Hackspace Berlin. Since Deepmind showed what neural networks can do with AlphaGo, I have co-founded the Berlin AI working group. The working group deals with the technology itself and with technology assessment in the case of massive use of AI systems.

**2020: ITO / TCN Foundation (Inzwischen: Linux Foundation for Public Health)****3.2020-5.2020**

In the #WirVsVirus Hackathons in March 2020, I supported several teams as a mentor and project manager who developed Covid tracing apps and started the international standardization of this tracing technology. We helped develop the technology that has become established for all corona tracing apps today. Apple and Google have implemented them on the operating system level and SAP and Telekom on behalf of the federal government in the Corona Warn app. I think the tracing app is the best piece of open source software the German state has made to date - and it is based directly on the technology that was developed and demonstrated as part of the #WirVsVirus hackathon.

**Freitagsrunde, TU-Berlin****2002-2007**

The Freitagsrunde student initiative, which I co-founded, represents the interests of the students in Faculty IV (computer science, electrical engineering, technical computer science). In this context, I established and led a basic programming course and a second course on the use of Eclipse in basic studies in 2004, which we have carried out several times since then. From 2003 to 2007 I was a member of the Faculty Council, the highest body in the faculty that decides on all issues relating to computer science studies. In addition, I was a member of the training committee, which serves as a complaint, mediation, support and preparatory work point for the faculty council. I participated in various appointment committees.

Technologies: Java, Eclipse.

**KNOWLEDGE**

- Programming and software development: Focus on object-oriented and imperative programming in Python, Javascript, Obj-C, regular expressions, SQL, Java, Shell, Ruby, C / C ++. Advanced knowledge of functional and logical programming languages.
- Experience with agile processes, especially Scrum and XP. A lot of experience with the practices of test automation, pair programming, continuous integration, retrospectives.
- Development of classic and desktop-like web applications, applications for the Mac, hardware control, front-end and database applications.
- Administration of Linux (and Mac), with an emphasis on automation and DevOps on Linux.
- Interaction Design: User-friendly design of programs and websites
- Operating Systems: Mac, Linux.
- Very good knowledge of English, some Spanish and French

**Technology Matrix*****I'm learning***

Vue.js, Deep Neural Networks, FastAI

***I'm best at***

Python 2/3, Automatisierte Tests, UnitTests, Selenium/ Webdriver, CI/CD, Refactoring, Infrastruktur als Code, Jinja, SQLAlchemy, Alembic, API-Design, REST APIs, Shell, Nginx, CSS, Sass/SCSS, HTML5, Java-Script, jQuery, MySQL, SQLite, git

***I'm good at***

Flask, Pyramid, Django, Tornado, PyPy, Microservices, Numpy, Pandas, Jupyter, Security, Ruby, Capybara, Apache HTTPD, HaProxy, Caddy, Jenkins, InfluxDB, Redis, CoffeeScript, Bokeh, Jasmine, Underscore.js, Backbone.js, Marionette.js, Jasmine.js, Moment.js, JSON Editor, Matplotlib, FontAwesome, Bootstrap, Ansible, Linux Administration (RedHat/ CentOS, Ubuntu), Icinga, Reproducible infrastructure, Docker/ Container, Scrum / Agile Development (Scrum Master, iterative und inkremental, Lean Management), Open Source/Free Software

***I was once good at***

Objective-C, Cocoa, XCTest, CoreData, Xcode, C/C++, Java, SmallTalk, R, TypeScript, CoffeeScript, Ember.js, SproutCore, Angular, D3, Make, LESS, Autotools, Vagrant, Puppet, RabbitMQ, ZeroMQ, Mercurial, Bazaar, SVN, CVS, ZODB, Zope, MongoDB, Java, Eclipse, Trac, Bitten, SyncML, Bluetooth, Networks und P2P Systems, Concurrent programming, Assembler, Usability, RDF, Ontologies, 3D-Modelling, Maya, Arduino

**HOBBIES**

In my free time I sing in a choir, play the old Chinese board game Go, fly kites, paragliders, juggle and do woodwork.