

Timo Dörr

Graduate computer scientist

* April 14, 1984

https://github.com/Dynalon



Computer scientist and enthusiastic fullstack web developer with open source ambitions.

WORK EXPERIENCE

11/2021 -12/2022

Fullstack Developer & Architect (freelance)

Traxpay GmbH, Frankfurt am Main (Remote)

Consulting and support in architecture and development issues of various web technologies and applications, hands-on support and further development of a support application in the financial environment for a Fintech (existing customer, see period 04/2019-04/2020).

<u>Technologies used</u>: TypeScript, React, SASS, Bootsrap, CypressJS/TDD, Webpack, REST, OAS 3.x (Swagger), NodeJS, SCRUM, Keycloak/OIDC/OAuth 2.0

07/2020 -10/2021

Frontend Developer (freelance)

HeidelbergCement AG, (Heidelberg & Remote)

Development in several project teams in the environment web application for production, shift and event planning and handling in the area of cement production in the international group environment. The web application was redeveloped from scratch as an SPA as part of a broad-based digitization strategy. Part of my tasks included the design and implementation of individual frontend views with a focus on interactive graphical visualization of complex data points and contexts. The design of REST API endpoints (OpenAPI) as well as the connection to them was also part of the task. The introduction and implementation of integration and end-2-end tests using CypressJS was fully done by me.

<u>Technologies used</u>: TypeScript, React, d3.js, REST, MaterialUI, NodeJS, Express, Docker, Cypress/TDD, GitLab CI, Storybook, OAuth 2.0

04/2019 -

04/2020

Fullstack Developer & Architect (freelance)

Traxpay GmbH, Frankfurt am Main

Development of a web application in the financial environment for a Fintech. The web application replaces a legacy system on JSF/Java. Part of my tasks included the design and implementation of the entire frontend, the analysis of the legacy application and design of the new REST API, creation of a REST contract document (OAS 3.0/Swagger via "Contract First") as well as the creation of mockservices and test cases in NodeJS and CypressJS. A connection to a central authentication and authorization service via OAuth 2.0 (Keycloak) was also realized.

<u>Technologies used</u>: TypeScript, React, Redux, SASS, d3.js, Webpack, REST, OAS 3.0 (Swagger), NodeJS, Express, Cypress/TDD, SCRUM, Keycloak/OIDC/OAuth 2.0

09/2017 -12/2019

Frontend Developer & Architect (freelance)

Etecture GmbH, Karlsruhe

Collaboration in the project business at a service provider with focus on frontend in the automotive group environment. The tasks included the further development of the in-house frontend framework of an automotive manufacturer based on React/Redux as well as the collaboration on customer-specific projects including consulting and support for internal employees. The development followed an agile approach and included the complete and independent implementation of functionality and ensuring the quality of the delivered products.

<u>Technologies used</u>: TypeScript, React, Redux, SASS, HTML5, CSS Modules, Webpack, REST, Jasmine, Webdriver/Selenium, JIRA, Azure Pipelines, Docker, git, storybook, SCRUM

01/2017 -

06/2017 Lead Frontend Developer & Architect (freelance)

Credit Suisse AG, Zurich

Collaboration both lead engineer with architect tasks and guidance of offshore teams in the frontend environment. The project included the replacement of an existing enterprise application with over 1,000 users with a modern and responsive web application.

<u>Technologies used</u>: TypeScript, Angular2, RxJS, Redux (ngrx), Angular Material, SASS, Webpack, REST, Jasmine, Protractor, JIRA

07/2016 -12/2016

Fullstack Developer & Architect / Front- and Backend (freelance)

HAYS AG, in operation for Hugo Boss AG, Metzingen

Complete architectural concept and implementation of a modern, visually sophisticated single-page application for execution on tablet devices. The implementation was done completely independently based on static screen designs and templates. The development and validation of the design as well as the full-functional creation of a prototype was done independently by me and included the entire frontend (Angular2/TypeScript) as well as backend (.NET WebAPI with MS SQL Server).

<u>Technologies used</u>: TypeScript, Angular2, RxJS5, SystemJS, WebSQL, OData, C#/.NET, WebAPI, REST, jQuery, Bootstrap, Team Foundation Server, Git

03/2016 -

_{09/2016} Fullstack Developer & Architect / Front- and Backend (freelance)

Generic.de SoBware Technologies AG, Karlsruhe, Germany

Requirements analysis incl. complete architecture conception and implementation of a group-wide authorization management for an automotive supplier. The activity included the complete creation of the web solution both backend and frontend. In the backend I implemented a gateway based on C#/.NET with ServiceStack for the ORM and the REST interfaces while in the frontend a classic Angular 1.x architecture with TypeScript was implemented.

<u>Technologies used</u>: TypeScript/JavaScript ES6, C#/.NET, AngularJS, REST, jQuery, Bootstrap, Git, ServiceStack, Team Foundation Server

08/2015 -02/2016

Frontend Developer (freelance)

TRUMPF Werkzeugmaschinen GmbH & Co. KG, Ditzingen, Germany, and. its subsidiary Axoom GmbH, Karlsruhe, Germany

Development of an Industry 4.0 PlaRorm within a mechanical engineering group for the implementation of IoT and SmartFactory solutions. The scope included the redesign of a modular PlaRormauSaus in the frontend using AngularJS as well as the integration of legacy applications into the new PlaRorm.

Product details for the project can be viewed at http://www.axoom.com.

<u>Technologies used</u>: HTML5, TypeScript, C#, AngularJS, REST, IoT, jQuery, Bootstrap, Karma, Grunt, Bower, Git, SignalR, WebAPI, Team Foundation Server

05/2015 -08/2015

Frontend Developer (freelance)

CompuGroup Medical AG, Koblenz, Germany

Development of a modern customer portal according to agile methods with SCRUM. The task included the complete development process from analysis, conception, implementation and validation of the individual modules. This included in particular the conversion of existing JavaScript legacy code into a modern, object-oriented architecture and the integration of various UI components in AngularJS.

<u>Technologies used</u>: HTML5, JavaScript, AngularJS, REST, jQuery, Bootstrap, Jasmine, Protractor, Grunt, Bower, SCRUM, JIRA/Confluence, Git

08/2014 - Lead Frontend Developer (freelance) 04/2015

Krones AG, Neutraubling near Regensburg, Germany

Realization of a sophisticated web application for the evaluation and real-time display of KPI data from the machine control environment. Realization of the frontend architecture in an agile process according to customer requirements. Integration of the REST/JSON interface in close cooperation with the backend team (C#/.NET). In addition to the design and implementation of the architecture in JavaScript as a Single Page Application (SPA), my responsibilities also included planning, guidance and code reviews of internal and external team members or suppliers. A real-time connection was implemented via Websockets/SignalR and integrated into the frontend. In addition to established charting tools such as KendoUI, customized dynamic charts and animated visualization controls based on SVG were also created and linked via JavaScript for the appealing visualization of machine-specific parameters.

<u>Technologies used</u>: HTML5, JavaScript, CSS, .NET/C#, jQuery, KnockoutJS, RequireJS (AMD), DurandalJS, KendoUI, Snap.svg, Zurb Foundation, Subversion

05/2014 - Fullstack Web Developer (Front- & Backend) 07/2014

NETSYNO SoBware GmbH, Karlsruhe, Germany

Involvement in the project business in the agency environment. Tasks included conception and implementation of modern REST based web applications with focus on HTML5 and JavaScript. Agile software methods such as SCRUM and TDD were applied in the front- and backend development.

<u>Technologies used</u>: AngularJS, Durandal/KnockoutJS (MVVM), jQuery, Python/Django, Git, Nginx

07/2013 - Mono Project - Google Summer of Code 2013 10/2013

Google-sponsored implementation of a SoBware project

Topic: "Extension of a REST based synchronization server in C#/.NET on Linux with encrypted data storage and dynamic HTML5 frontend."

Using O/R Mapper, a database connection to SQLite and PostgreSQL was implemented, as well as transparent encryption with multi-key capability. In addition, an HTML5 frontend based on AngularJS was created as part of the project.

<u>Technologies used</u>: C#/Mono, PostgreSQL, SQLite, ServiceStack O/R Mapper, JSON, AngularJS, Twitter Bootstrap, Git

01/2013 - Fullstack Web Developer (Front- and Backend) 06/2013

nwebs GbR, Karlsruhe

Student job as a web developer in the area of front-end and back-end development as a full-fledged member in a start-up. Responsibilities included maintaining and enhancing various modern single page web applications (SPA) using modern development paradigms such as clean code and TDD.

Technologies used: REST, Python, Django, HTML5, Javascript, jQuery, KnockoutJS, Git

07/2012 - Gnome Foundation - Google Summer of Code 2012 10/2012

Google-sponsored implementation of a SoBware project

Topic: "Extension and porting of the GTK/.NET based media player Banshee to OS X".

In addition to the port to Mac OS X, a connection from C# to the USB and removable media interface of the operating system was realized. PlaRormspeci>c peculiarities in the integration of third-party libraries such as GStreamer and GTK/Quartz were identi>ed and adapted.

Technologies used: C#/Mono, Git, GTK+, Gstreamer

01/2007 -10/2010

Web developer and administrator

freelance, various clients

Customer specific software development in the eCommerce environment including administrative support of the Linux servers. Creation of modules for xt:Commerce and osCommerce with PHP/MySQL. Among the implemented modules were a connection to Amazon Market Place, an automatic credit check with an Infoscoring service and an automatic payment data reconciliation.

<u>Technologies used</u>: PHP, MySQL, Linux, Apache, osCommerce, xtCommerce

EDUCATION

10/2005 -04/2014

Karlsruhe Institute of Technology (KIT), Karlsruhe, Germany

Studies of general computer science (diploma) with focus on parallel processing, telematics and operations research.

Degree: Diploma, overall grade good (1.9)

09/2001 -05/2004

Carl-Benz School, Mannheim

Technical high school with specialization in computer science

Graduation with general university entrance qualification (Abitur grade: 1.9)

Successful participation in the lecture "Practical Computer Science" as a student of the University of Mannheim

OPEN SOURCE - OVERVIEW: HTTP://GITHUB.COM/DYNALON

MDwiki

http://www.mdwiki.info

Project initiator, sole lead developer, complete planning and implementation.

CMS/Wiki system that is 100% implemented as a client-side Javascript single-page application. Uses Markdown as markup language and embeds numerous dynamic elements via Javascript. Started in 2012 as ASP.NET/Javascript hybrid solution, since August 2013 available as pure client-side HTML5/Javascript/jQuery application.

Technologies used: TypeScript, JavaScript, HTML5, jQuery, Jasmine, Twitter Bootstrap, Git

Reactive State

http://github.com/Dynalon/reactive-state

Project initiator, sole lead developer, complete planning and implementation.

Redux State Container clone based on RxJS and reactive principles; Includes bridge to React analogous to react-redux.

Technologies used: TypeScript, Redux, RxJS, Webpack, Mocha/Chai/Enzyme, Travis (CI)

Rainy

http://dynalon.github.io/Rainy

Project initiator, sole lead developer, complete planning and implementation.

Synchronization server based on REST for the notebook applications Tomboy/Tomdroid. Developed in C# for the Linux/UNIX PlaRorm. Started in fall 2012, accepted as Google Summer of Code project in summer 2013.

Technologies used: C#/.NET, ServiceStack, ORMLite, OAuth, SQLite, HTML5, JavaScript, AngularJS, Git

JsonConfig

http://github.com/Dynalon/JsonConJg

Project initiator, sole main developer, complete planning and implementation

.NET library for processing program con>gurations in JSON format. Supports inheritance of con>guration pro>les and dynamic updating of con>guration parameters. Also available via NuGet.