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**HELLO!**

## FULLSTACK SOFTWARE DEVELOPER+

### KEY FACTS

DELIVERING SOFTWARE SINCE	2009
KEY CONSULTING FIELDS	Software Development Agile Projects and Processes Microservice Architecture
LANGUAGES	German (mother tongue), English (fluent)

### FAVORITE ROLES

FULLSTACK DEVELOPER	Requirements engineering Implementation Test automation Infrastructure
TECH LEAD	Hiring process setup and interviews Upskilling junior colleagues on the job Driving architecture improvements
TRANSLATOR BUSINESS-TECH	Align business needs and technical constraints Develop common language

### CORE TECH STACK

FRONTEND	Typescript/Vue, Javascript/Angular
TEST AUTOMATION	Cypress, Playwright, Selenium, Geb
BACKEND	Java/Spring, TypeScript/NestJs
TEST AUTOMATION	Spock, Jest
INFRASTRUCTURE	AWS, Azure, Heroku, Docker
AUTOMATION TOOLS	Terraform, Bash

## EXTENSIVE TECH STACK

<b>BACKEND FRAMEWORKS</b>	NestJS, Spring Framework, Spring Boot, Spring Data JPA, Spring Data REST, Spring Security, Spring Web Services, Spring REST, Hibernate, JAX-RS, JSON, JAX-WS, Swagger, Tomcat, Spring Security, Spring Cloud, Spring Sleuth, Netflix Hystrix, Netflix Ribbon, Netflix Zuul, Netflix Sleuth, Apache Solr, Apache Zookeeper, Spring Kafka, Spring Cloud Stream, Apache Camel, Apache CXF, Netflix Ribbon, Netflix Hystrix, Netflix Sleuth, Netflix Zuul, Apache Lucene, Apache Solr, Apache Zookeeper, Togglz, Spock, JUnit, Mockito, DbUnit, REST-assured, Gatling, Selenium, JMeter, PiTest
<b>FRONTEND FRAMEWORKS</b>	Vue, Nuxt, Vuetify, Angular, Angular material, Bootstrap, Ionic, react.js, handlebars.js, postal.js, npm, Grunt, Webpack, Jasmine, Galen, Geb, Thymeleaf, Swing, Eclipse RCP (swt), Apache Struts 2, servlet api, java server pages (jsp), Google tag manager, Usercentrics, Google analytics, Adobe analytics, Contentful
<b>CLOUD</b>	AWS, Azure, Heroku, Google Compute
<b>INFRASTRUCTURE</b>	Tomcat, Jetty, Apache HTTP, Undertow, NGINX, Docker, Vagrant, Consul, Swarm, Google Compute, Wildfly, Kubernetes, Akamai, Kibana, Elastic Search, Filebeat, Logstash, Prometheus, Grafana
<b>NOSQL DATABASES</b>	MongoDB, Elastic, Apache Solr, Neo4J, Redis, Cloud Firestore
<b>SQL DATABASES</b>	PostgreSQL, MySQL, Azure SQL, Impala, H2, HSQLDB
<b>MESSAGING</b>	Apache Kafka, RabbitMQ, IBM MQSeries, Apache ActiveMQ, Bull (Node/Redis)
<b>BUILD &amp; CI</b>	Github Actions, Azure Devops, Gitlab, Maven, Gradle, npm, grunt, webpack, Ansible, Vagrant, Docker, Bamboo, Sonar, JRebel, CVS, Subversion, Git, Stash, Sonar
<b>METHODICAL KNOWLEDGE</b>	Test Driven Development (TDD), Behavior Driven Development (BDD) Objektorientierte Programmierung (OOP), Aspect Oriented Programming (AOP), Paper Prototyping, Software Design Pattern, Consumer Driven Contracts, Datenmodellierung, Datenbankdesign, Continuous Integration, Continuous Delivery
<b>PROCESS MODELS</b>	Scrum, Kanban, Extreme Programming (XP), Pair-Programming
<b>COLLABORATION TOOLS</b>	JIRA, Confluence, Redmine, Miro, Adobe XD, Figma
<b>OPERATING SYSTEMS</b>	MacOS, MS Windows, Linux
<b>IDEs</b>	Jetbrains Toolbox (IntelliJ), Visual Studio Code

## PROJECT HISTORY

### 01/2022 - 06/2022 // Wallbox Online Retail

INDUSTRY	E-Commerce
CHALLENGE	<i>"Build an online shop to sell and rent charge points (wallboxes) for electric vehicles. Build IOT utilities to manage wallbox stock and flash firmware updates in the warehouse and in the field."</i>
ROLE	Fullstack Software Developer
RESPONSIBILITIES	<ul style="list-style-type: none"><li>* Evaluation of off-the-shelf solutions (such as Shopify)</li><li>* Custom-build online shop due to the lack of rental features in off-the-shelf-solutions</li><li>* Implement checkout process, payment and fulfillment</li><li>* Setup infrastructure to build, test and run on from scratch</li><li>* Track customer journey with on-page tracking and customer satisfaction polls</li><li>* Build a web interface to control wallboxes in the field via Open Charge Point Protocol (OCPP)</li><li>* Build and print a 3D model to facilitate firmware updates on site via ethernet</li></ul>
TECH STACK	
// BACKEND	Typescript, NestJs, Jest, OCPP, Websocket, REST
// FRONTEND	VueJs, Nuxt, Vuetify, Cypress, Playwright, Typescript
// INFRASTRUCTURE	Netlify, Heroku, Docker, MongoDB, Redis, Github, Git, Sendcloud, Sendgrid, Stripe, Auth0, FreeCad, Typeform
// COLLABORATION	Scrum, Jira, Confluence, Miro, Figma

### 01/2021 - 12/2021 // Electricity Provider Startup

INDUSTRY	Energy Sector
CHALLENGE	<i>"Sell electricity tariffs as a bundle add-on product for a photovoltaic system rental company. The whole process should seamlessly integrate with the core business whilst being as loosely coupled to the existing system as possible."</i>
ROLE	Tech Lead
RESPONSIBILITIES	<ul style="list-style-type: none"><li>* Hiring process setup and interviews</li><li>* Evaluation of Powercloud as an energy ERP candidate</li><li>* Integration into the mother company's salesforce processes</li><li>* Integration of the electricity fulfillment partner</li><li>* Design and deliver customer facing web forms to collect necessary data</li><li>* Azure based infrastructure setup</li></ul>
TECH STACK	
// BACKEND	Java 11, Spring Boot, Typescript, NestJs, Jest, REST
// FRONTEND	VueJs, Nuxt, Vuetify, Cypress, Playwright, Typescript
// INFRASTRUCTURE	Salesforce, Docker, MongoDB, Redis, Braze
// COLLABORATION	Kanban, Jira, Confluence, Miro

11/2019 - 01/2021 // **Investment Management Platform**

INDUSTRY	Financial Services
CHALLENGE	<i>"Rebuilt the Access-based asset management software to support complex reporting scenarios, fine-grained auditability and improved user experience."</i>
ROLE	Tech Lead
RESPONSIBILITIES	<ul style="list-style-type: none"><li>* Enabling the young, highly motivated and fully committed team in architecture decisions</li><li>* Upskilling individual team members</li><li>* Reverse Engineering of the original Access based application</li><li>* Partial reimplementations of most problematic parts</li><li>* Continuous migration between new and old system leveraging the event-based approach of the redesign.</li><li>* Setup of a proper dev environment, allowing for system test automation in isolation of the production environment</li></ul>
TECH STACK	
// BACKEND	Java 11, Spring Boot 2, Axon, Oracle, Postgres, Hibernate, JPA
// FRONTEND	VueJs, Selenium, SCSS, Typescript
// INFRASTRUCTURE	Maven, Git, Gitlab, Docker, Kibana, Elastic Search, Filebeat, Grafana, JIRA, Confluence
// COLLABORATION	Scrum, Jira, Confluence, Adobe XD

02/2019 – 10/2019 // **Copyright Collecting Society Data Migration**

INDUSTRY	Copyright Collecting Society
CHALLENGE	<i>"Reverse engineer the legacy database model with decades of history and prepare and develop a migration strategy to the new schema."</i>
ROLE	Fullstack Software Developer
RESPONSIBILITIES	<ul style="list-style-type: none"><li>* Development of a UI to visualize and analyze the data to be migrated</li><li>* Analysis and documentation of the old schemas data structures and specifics</li><li>* Iterative development of the actual migration logic in close connection with the product department</li><li>* Performance optimization of the actual migration process to enable large scale migration runs</li><li>* Building up and spreading knowledge on Kubernetes inside the team and the organization</li></ul>
TECH STACK	
// BACKEND	Java 8, Spring Boot 2, Oracle, Postgres, Cucumber, Querydsl, Hibernate, JPA
// FRONTEND	Angular 7, Angular Material, Cypress, SCSS, Typescript
// INFRASTRUCTURE	Maven, Git, Gitlab, Jenkins 2, Docker, TIBCO EMS, Kubernetes, Helm, Kibana, Elastic Search, Filebeat, Prometheus, Grafana, JIRA, Confluence, Tomcat
// COLLABORATION	Scrum, Jira, Confluence

04/2018 – 12/2018 // **Recruitment ERP**

INDUSTRY	Personal Services Provider
CHALLENGE	<i>"Rebuilt the existing ERP system from the ground up ensuring future expandability of the system as a whole, in order to keep the client at the forefront of future industry specific innovations."</i>
ROLE	Fullstack Software Developer
RESPONSIBILITIES	<ul style="list-style-type: none"><li>* Development of domain specific microservices</li><li>* Optimization of the in-house search and matching engine with Apache Solr</li><li>* E2E-Tests with Selenium and Cypress</li><li>* Frontend development with Angular 6 and Angular Material Components</li><li>* Bootstrapping a dockerized CI/CD environment</li><li>* Installation and configuration of a monitoring system using ELK and Grafana/Prometheus</li></ul>
TECH STACK	
// BACKEND	Java 8, Spring Boot 2, Keycloak, Postgres, RabbitMQ
// FRONTEND	Angular 6, Angular Material, Cypress, Selenium, SCSS, TypeScript
// INFRASTRUCTURE	Maven, Git, Jenkins 2, Docker, Kibana, Elastic Search, Filebeat, Prometheus, Grafana, JIRA, Confluence, Tomcat, Microservices, DDD
// COLLABORATION	Scrum, Jira, Confluence

01/2018 – 03/2018 // **Business Travel Management Portal**

INDUSTRY	Financial Services
CHALLENGE	<i>"Facilitate the client's strategy to map previously in-house designed business logic using COTS software. Then help to shift the client's in-house design resources to focus on redeveloping market differentiating solutions based on an event based microservice architecture."</i>
ROLE	Backend Developer
RESPONSIBILITIES	<ul style="list-style-type: none"><li>* Event based integration of numerous Commercial off-the-shelf (COTS) components via Kafka.</li><li>* Microservice development to drive the in-house user management</li><li>* Automating service deployment to the MS Azure Cloud</li><li>* Provisioning and extending the authentication service (Keycloak)</li><li>* Requirement engineering based on the legacy system and user feedback</li><li>* Supporting the operations team in stabilizing the in-house Kafka setup</li></ul>
TECH STACK	
// BACKEND	Java 8, Spring Boot, Groovy, Spring Cloud Stream, Spock
// INFRASTRUCTURE	Azure, Keycloak, Kafka
// COLLABORATION	Scrum, Jira, Confluence

07/2017 – 12/2017 // **Online car insurance portal**

<b>INDUSTRY</b>	Insurance
<b>CHALLENGE</b>	<i>"Deliver an MVP for a direct B2C insurance as a test balloon for a large B2B insurance group. The MVP must facilitate the entire car insurance application process and pass on the collected data to the company's existing internal backend system."</i>
<b>ROLE</b>	Frontend Developer
<b>RESPONSIBILITIES</b>	<ul style="list-style-type: none"> <li>* Portal frontend development with Angular 5 and Angular Material Components</li> <li>* Implementation of an insurance rate calculator widget to be embedded into other (non-angular) host websites</li> <li>* Supporting backend development for existing Spring Boot Web Services</li> <li>* Bootstrapping and maintenance of a continuous integration pipeline for backend and frontend components</li> <li>* Developing an app version of the portal with ionic</li> <li>* Integrating a headless CMS (contentful)</li> </ul>
<b>TECH STACK</b>	
// BACKEND	Java 8, Groovy, Spring Web Services, Tomcat, Postgres, Netflix Hystrix, FF4J, Spock
// FRONTEND	TypeScript, Angular 5, Ionic, SCSS, Karma, Jasmine, Protractor
// INFRASTRUCTURE	Maven, npm, Git, Bitbucket, Jenkins 2, Google Storage, contentful
// COLLABORATION	Scrum, Jira, Confluence

04/2016 – 03/2017 // **Recipe Ingredient Mapping**

<b>INDUSTRY</b>	E-Commerce
<b>CHALLENGE</b>	<i>"Create a fully automated solution to link recipe ingredient lists to products available in a large grocery store. To increase visibility and the potential user base, make the solution available as a plugin component on cooperation partners' websites."</i>
<b>ROLE</b>	Fullstack Developer
<b>RESPONSIBILITIES</b>	<ul style="list-style-type: none"> <li>* Conception and implementation the mapping logic from text to ingredients in a dedicated micro service</li> <li>* Data preprocessing of user input using natural language processing (NLP)</li> <li>* Evaluation and combination of several ingredient search algorithms</li> <li>* Implementation of a JavaScript snippet to be embedded into other websites offering recipes and to redirect the user to the respective mapping result in the web shop</li> <li>* Automate the incremental import of company-owned recipe data from CMS over Kafka</li> <li>* Implementation of a searchable recipe catalogue using Apache Solr</li> </ul>
<b>TECH STACK</b>	
// BACKEND	Java 8, Groovy, Spring Framework, Spring Data JPA, Spring Web Services, Spring Kafka, Camel, Spock, Swagger, Kafka, Apache Solr, Apache Kafka, Tomcat, Netflix Hystrix, Netflix Ribbon, Netflix Sleuth, Netflix Zuul, Togglz, Spock, Gatling, DbUnit, REST-assured, JAX-RS
// FRONTEND	TypeScript, JavaScript, React, Postal.js, SCSS, Jasmine, Galen, Geb, Google Analytics, Adobe Analytics
// INFRASTRUCTURE	Maven, npm, webpack, Docker Swarm, Bamboo, Git, Stash, Akamai
// COLLABORATION	Scrum, Jira, Confluence

#### 04/2015 – 08/2015 // **Product Search**

<b>INDUSTRY</b>	E-Commerce
<b>CHALLENGE</b>	<i>"Extract and re-implement the product search function of a monolithic legacy shop system for a large grocery retailer. Improve search results in terms of precision, recall and presentation. Then personalize the search results of each customer base on their shopping history."</i>
<b>ROLE</b>	Backend Developer
<b>RESPONSIBILITIES</b>	<ul style="list-style-type: none"> <li>* Legacy system refactoring of the shop monolith to separate product search logic components</li> <li>* Implementation of a search micro service to provide the full product search functionality via REST in an independent micro service</li> <li>* Provisioning a meaningful monitoring to gain insights into user behaviour and highlight weak spots in the current implementation</li> <li>* Optimizing Solr schema based on the observed user behaviour</li> <li>* Search experience personalization based on the user's shopping history</li> </ul>
<b>TECH STACK</b>	
// BACKEND	Java 8, Groovy, Struts 2, Spring Boot, Spring Data, Spring Web Services, JPA, Hibernate, Postgres, Apache Solr, Apache Zookeeper, Apache Kafka, Tomcat, Netflix Hystrix, Netflix Ribbon, Netflix Sleuth, Netflix Zuul, Spock, Gatling, DbUnit, REST-assured, JAX-RS
// FRONTEND	JavaScript, Java Server Pages (JSP), Handlebars.js, Require.js, Postal.js, Jasmine, Galen, Geb, Google Analytics, Adobe Analytics
// INFRASTRUCTURE	Maven, npm, Grunt, Git, Stash, Bamboo, Docker Swarm
// COLLABORATION	Scrum, Jira, Confluence

#### 12/2014 – 03/2015 // **Online Wine Shop**

<b>INDUSTRY</b>	E-Commerce
<b>CHALLENGE</b>	<i>"Develop a standalone web shop to sell wine online and embed it into the existing infrastructure of the company including internal accounting and inventory management systems. Use commercetools as the shop backend to evaluate it for the company's core business."</i>
<b>ROLE</b>	Fullstack Developer
<b>RESPONSIBILITIES</b>	<ul style="list-style-type: none"> <li>* Development of the web shop frontend using Thymeleaf</li> <li>* Backend development using Spring Boot</li> <li>* Integration of the group-owned commodities management</li> <li>* Shop backend integration with the commercetools commerce platform</li> </ul>
<b>TECH STACK</b>	
// BACKEND	Java 8, Spring Boot, Spring Web Services, Spring JPA, Spring Security, Camel, Hibernate, Togglz, JUnit, Mockito, DbUnit, JMS-Queue (IBM WebSphere Connector), Postgres, Elastic Search
// FRONTEND	Thymeleaf, JavaScript, HTML5, SCSS
// INFRASTRUCTURE	Maven, Docker container, Heroku, Bamboo, Git, Tomcat, Jetty, Undertow, Stash, Sonar, commercetools, Mandrill
// COLLABORATION	Scrum, Jira, Confluence

03/2014 – 11/2014 // **Big Data Platform**

<b>INDUSTRY</b>	Market Research
<b>CHALLENGE</b>	<i>"Develop a unified data lake, in which all the data of the numerous data silos can be managed and made accessible for ad hoc analysis. The platform must ensure integrity of the data and provide the usual data cleansing and anonymization mechanisms."</i>
<b>ROLE</b>	Big Data Developer
<b>RESPONSIBILITIES</b>	<ul style="list-style-type: none"><li>* Development of ETL (Extract-Transform-Load) pipelines inside the Hadoop eco system</li><li>* Implementation of Business Intelligence (BI) reports based on an Impala Database</li><li>* Code reviews and orchestration of an India-based off-shore development team</li><li>* Bootstrapping and maintenance of the continuous deployment (CD)</li></ul>
<b>TECH STACK</b>	
// BACKEND	Spring Web Services, Spring Data JPA, Spring Data REST, REST-assured, Junit
// FRONTEND	Thymeleaf, JavaScript, HTML5, SCSS
// COLLABORATION	Jira

08/2011 – 01/2014 // **Scientific work in the field of Data Mining**

<b>INDUSTRY</b>	Research
<b>CHALLENGE</b>	<i>"Facilitate the development process of clustering algorithms for extremely large and high dimensional datasets and their evaluation against each other."</i>
<b>ROLE</b>	Research assistant
<b>RESPONSIBILITIES</b>	<ul style="list-style-type: none"><li>* Conception of a clustering algorithm suitable for extremely large and high dimensional datasets (e.g. gene sequences) based on MapReduce</li><li>* Hadoop-based implementation of the clustering algorithm</li><li>* Extension of the scientific stream data analysis suite (MOA) for online clustering algorithms</li><li>* Developing a tool for experiment design, automated parameter tuning and result management in the field of machine learning algorithms.</li><li>* Tutorials for data structures and algorithms</li><li>* Supporting lecture and exam preparation</li></ul>
<b>TECH STACK</b>	
// BACKEND	Java, C++
// FRONTEND	Eclipse RCP, Swing, QT
// Infrastructure	Maven, Subversion, Hadoop, Weka, Moa