

Munich, 9. Januar 2026

## Profile of Mr. Markus Hopf Dipl.-Ing. (FH)

**Picture:**



**Overview:**

- Dipl.-Ing. Computer Engineering (FH)
- Certified Professional Scrum Master PSM
- Certified Spring Professional
- Sun Certified Java Programmer
- Sun Enterprise Trainer
- Sun Certified Enterprise Architect
- OMG Certified UML Professional
- IBM Certified XML Professional

**Skills:**

- Senior Full Stack Developer
- Cloud Microservice architecture
- Single Page Applications (SPA)
- Jakarta EE, Java, JavaScript, Typescript, Groovy, Kotlin, Scala, Go, Python
- Angular, ReactJs, Wicket
- Spring Boot, Hibernate
- Kafka, NodeJs, npm
- Kubernetes, Docker
- REST API Webservices
- Coordination of Projects

**Availability:** From 1.4.2026 100%

**Location:** Munich or Remote.

**Conditions:** x,- € per hour.

**Experience:** about 30 years

**Birthday:** 13.02.68

**Address:** Dipl. Ing. (FH) Hopf, Markus  
Klara-Ziegler-Bogen 53, D-81739 München  
Mobil: +49 172 / 95 94 590  
E-Mail: [info@hopf-it.de](mailto:info@hopf-it.de)  
Homepage: [www.hopf-it.de](http://www.hopf-it.de)

## **Past projects:**

### **Crypto Key Distribution**

Role: Senior Full Stack Developer  
Branche: Software  
References: Co. Akkodis in Stuttgart/Remote  
Contact person Mr. Edgar Klein Co. Akkodis  
<https://www.akkodis.com/de>

From	02/2025	-	02/2026	with	13 months
------	---------	---	---------	------	-----------

REST server JSON encoding based on Java with Spring Boot

TypeScript with Angular Web UI

Docker container image as build artifact

Nexus dependencies and target for build artifacts

Creating and optimizing build and CI/CD pipelines

Jenkins Multi-Branch Pipeline

Unit and integration testing with JUnit

Performance testing and monitoring

Ensuring code quality through SonarQube analysis

Optimizing software architecture and deployment processes

PKI Key Generation

Java 21 Spring Boot Applications

JHipster with JDL Schema Files

Ansible for Process Automation

SOAP Interface for data exchange

Message signature with OpenSSL

Certificates and PKCS12-Files

Liquibase Database Migrations

Podman Container and Image Management

LDAP Access over Keycloak

Postgres as relational Database

Sonar Quality Checks

E2E Integration Tests

Key Management for Satellite Communication

Role-based Access Control - RBAC

Provider for critical Infrastructures

Management of Security Modules

Multi-Factor Authentication (MFA)

Crypto know-how

Key distribution and PKI

Satellite navigation  
 Requirements analysis  
 Agile development of software projects  
 Creation of concepts and requirements  
 Functional software testing  
 Reducing test and development cycles  
 Requirements management, capturing requirements

Realized with:	Operatingsystems	Unix, Linux, Windows
	Datenbases	PostgreSQL, MariaDB
	Developmenttools	IntelliJ, Visual Studio Code
	Tools	Angular, @angular/material, bootstrap, eslint, TypeScript, webpack, router, SOAP, JHipster, Ansible, Python, pip, SSH Keys, Openssl, PKCS12, keytool, junit, Java, JakartaEE, JavaScript, podman, Docker, Keycloak, FreeIPA, OpenLDAP, Kerberos, Postgres, Spring Boot, Znuny, IAM, MFA, RedHat, RHEL, Linux, Windows, JIRA, Bitbucket, Exceed TurboX, Jenkins, Sonar, Sonarqube, jacoco, Confluence, checkstyle, archunit, prometheus, JWT, Websockets, Grafana, Logstash, Graylog, checkmk, SNMP, Nexus, gradle, groovy, kotlin, fasterxml, github, vaadin, apache commons, commons, netty, swagger, undertow, jakarta, joda-time, bouncycastle, IntelliJ, jetbrains, eclipse, hibernate, hamcrest, mapstruct, mockito, seleniumhq, slf4j, springframework, wsdl, nodejs, node, npm, Liquibase, REST, JSON, JavaScript, Git, CI/CD, Spring Actuator, Java 21 Streams API, Spring Data, freeIPA, LDAP

## Bank Migration - Atruvia

Role: Technical Project Management

Branche: Bank

References: Co. Zühlke AG in London/Remote

Contact person Mr. Kris Hubert, Mr. Tommaso Solcia

<https://www.amass-technology.com>

<https://www.zuehlke.com>

From	10/2024	-	02/2025	with	5 months
------	---------	---	---------	------	----------

Clarification of minimum requirements

Relocation of servers to a data center

Data center commissioning

Project Management Coordination Tasks

Migrationproject

IT-Architectur  
Meeting Planung  
Project Timeplan  
Covering all Customer Requests  
Review Documentation  
Evaluation of Test Results  
Suggestions for Improvements and Enhancements  
Internal Coordination  
Providing continuous Updates  
Report Projectstatus  
Data Transfer and Integration  
Credit Bank Migration for Peridot  
Peridot Customer Migration to Atrivua

Realized with:	Operatingsystems	Windows, Linux
	Datenbases	H2, Oracle
	Developmenttools	Eclipse, IntelliJ, Visual Studio Code
	Tools	maven, IBM

## Mission Control Panel - FELIS

Role: Senior Full Stack Developer  
Branche: Public Sector, Police  
References: Co. T-Systems in Berlin/Remote  
Contact person Mr. Tim Zett, Mr. Benjamin Zeiss, Mr. Frederic Mehl  
<http://www.t-systems-ifs.com>

from	04/2023	- 09/2024	with	18 months
------	---------	-----------	------	-----------

Asynchronous Microservices Landscape  
30 Microservices for Front- and Backend  
Reactive, resilient and scalable Applications  
Consequent Usage of Reactive Programming Paradigms  
RxJava Reactive Extensions for the JVM  
Redux Frontend Component Store with NgRx  
NgRx Components  
Callbacks, Promises, Futures and Kotlin Coroutines  
Event Bus with Non-Blocking Verticals  
Asynchronous Event Loop  
WebSockets Server-sent Events  
Usage of Fluent API  
Event Sourcing Pattern  
CQRS and Saga Pattern

Eclipse Vert.x Toolkit  
Kendo and Angular Material Design UI Components  
RESTful URL Design  
Vert.x-Web for RESTful HTTP Microservices  
AMQP Messaging with Apache Kafka  
Migration of Vert.x to Kafka  
Distributed Clustering  
Asynchronous Data and Event Streams  
Implementing Back-Pressure Streams  
Virtualised Environments and Containers  
Docker and podman Containerization  
One Time Password - Multi-Factor Authentication  
JWT/OAuth2 based Authorization  
CORS - Cross Origin Resource Sharing  
CSRF - Cross Site Request Forgery  
Zookeeper Cluster Manager  
Monorepo Usage with Nx  
Keycloak IAM Roles and Rights  
Cloud Virtualization-Platform VMware vSphere  
DevOps Gitlab Pipeline  
API-Gateway  
Python and Robot for Data migration  
AWS S3 File Storage  
Development of a 110 Control-Panel for the Police  
Disposition of Missions  
Policeman Management  
Tracing Management  
Mission Protocol and Management  
Location-based Map with Vectordata  
Creation of Requirements and Concepts  
Creation of Administration Guides  
Team Lead

Realized with:	Operatingsystems	AWS, Windows, Linux
	Datenbases	H2, MariaDB, MsSql, MongoDB, PostgreSQL

Developmenttools Tools	Eclipse, IntelliJ, Visual Studio Code, Jakarta EE, Powershell, maven, gradle, ant, Infinispan, Hazelcast, Vert.x4, Verticle, SLFj4, jackson, netty, logback, assertj, TCP/IP, Http, JUnit5, VisualVM, jMeter, RxJava, RxJS, ReactiveX, JavaScript, REST Assured, Docker Compose, Minikube, Apache Kafka, Apache FreeMarker, Thymeleaf, Pebble, Rocker, X-XSRF-TOKEN, AJAX, XSS, Consul, Zookeeper, Kubernetes, Skaffold, podman, Redis, GraphQL, Failsafe, surefire-plugin, Circuit Breaker, Node.js, SockJS, Prometheus, Micrometer, Grafana, ZooKeeper, Ansible, helm, Terraform, GraphHopper, Gitlab, Node18, Java20, Kendo, Angular Material Design, Angular16, Angular Nx, Jest, Karma, Reducer, Robot Framework, Taurus, Hibernate, DozerMapper, Sonar, SOAP, Liquibase, VMware vSphere, Keycloak, IAM, JWT, OpenID Connect /OAuth2, Websockets, nrwl/nx, nx.dev, Cypress, TypeScript, JavaScript, Html, Css, Atlassian, Jira, Confluence, Bamboo, draw.io, Fileon and ColorZilla
---------------------------	---

## Online Banking - Customer Focus

Role: Senior Full Stack Developer

Branche: Bank

References: Co. Atruvia/attempto in München

<http://www.atrivia.com>

from	02/2022	-	03/2023	with	14 months
------	---------	---	---------	------	-----------

Service Cut Design

Conception, Consulting and Maintain

Implementation in all Layers

Architecture Diagrams with ADOIT and ArchiMate

Java Spring Boot Microservices

Angular Single Page Application (SPA)

10 Microservices for Front- and Backend

TypeScript, Java, JavaScript, Groovy

RESTful Microservice Architecture

REST API Versioning

Red Hat Open Shift Cloud Environment

Docker Container into Kubernetes Cloud Environment

Jenkins CI/CD-Pipelines

Infrastruktur as Code (IaC)

JSON Web Token (JWT), Bearer- Authorization-Header

Usage of the Omnikanalplattform OKP  
Implementation of Java Banking Framework JBF  
Kubernetes Commands and Configuration  
Quality Tasks with Sonar and Linting  
Multi Maven Projects  
Nexus Artifact Repository  
JSON Data Communication  
Alerting, Health Checks  
Postman, Swagger, OpenAPI  
Redis In Memory Cache  
Host Connection and COBOL Copybook Integration  
Testautomation, Performance Analysis, Resilience  
Cypress and Karma Tests  
Sleuth, Zipkin, OpenTracing, Dynatrace  
Grafana and Dynatrace Monitoring  
Spring Boot, Spring Data, Spring Cloud OpenFeign  
Release and Feature Toggles  
Spring Expression Language  
NodeJs JavaScript Backend Development  
JavaScript NodeJs Tests with Mocha and Chai  
NGINX Configuration  
Soap Communication Protocol  
Kubernetes Secrets Configuration  
Semantic Versioning  
DevOps with CI/CD Jenkins Pipelines  
Unix Shell Scripts with bash  
Web Performance Analysis Tools  
Data Exchange with WSDL and SOAP  
JMeter Heavyweight Tests  
Development Parts for Online Banking Platform  
Browser and Mobil based Banking as Single Page Application (SPA)  
Creation of Concepts  
Creation of Administration Guides  
Reviews of Sourcecode  
Support of Developers  
Coordination Dev and DevOps Tasks  
Remote Communication over MS-Teams  
Agile Development in Scrum Team and SAFe  
Grooming, Planning, Retrospective, GIP  
Communication in English and German  
OnlineBanking and VR Banking App

Realized with:	Operatingsystems Datenbases	Red Hat Open Shift, Windows, Linux H2, Oracle
----------------	--------------------------------	--

Developmenttools Tools	Eclipse, STS, IntelliJ, Visual Studio Code Powershell, ADOIT, ArchiMate, LeanIX, Mapstruct, Hazlecast, Java 17, JUnit 5, Jupiter, Lighthouse, web.dev, requestmap.webperf.tools, webpack-bundle-analyzer, WebP, Angular 15, Postman, newman, Swagger, Git, Bitbucket, Jenkins, OTC, Red Hat OpenShift, AWS, Kubernetes, NGINX, Ingress, JMeter, Kafka, Teams, TypeScript, Groovy, JavaScript, Jasmine, Cypress, Mocha, Chai, Karma, Gherkin, cucumber, mural, xrepository, Sleuth, Zipkin, Opentracing, Dynatrace, Spring Boot, Spring Data, Docker, JPA, Hibernate Envers, LogBack, Log4j2, JWT, Maven, Nexus, Sonar, Lint, Hystrix, H2, Oracle, MsSQL, PostGre, Liquibase, NodeJs, npm, yarn, Checkstyle, curl, JIRA, OWASP, Kubectl, yaml, Notepad++, GraphQL, SASS/SCSS, SmartBear SoapUi, Citrix, SourceTree, SmartGit, Lombok, @angular/material, SQLDeveloper, Nx, ngxs/store, @ngrx/component-store, IBM RecordClassGenerator, Redis, Grafana, Prometheus, Istio, kibana, Confluence, JIRA, OpenAPI, ReadyAPI, planitpoker, electron, conceptboard.com, miro, wiremock, lucidchart, arc42, Sketch MeaXure
---------------------------	--

## Shared projects for judiciary - GeFa

Role: Technical Architect

Branche: Public Sector

References: Co. .msg in München/Ismaning

Contact person Mr. Shinja Strasser, Mr. Helmut Lämmermeier

<http://www.msg.de>

<http://www.gefa-justiz.de>

from	08/2021	- 02/2022	with	7 months
------	---------	-----------	------	----------

Architecture Responsibility and Service Cut

Domain based Microservices

Conception of Cross cutting themes

BSI Security-Requirements

Analysis of None-Functional-Requirements

Conception, Maintain and Consulting

Creation of Architecture Concepts

Greenfield Project

Communication with Senior Full stack Devs

Angular Single Page Application (SPA)

Browser based Court-WebApp  
Approx. 30 Microservices for Front- and Backend  
TypeScript, Java, JavaScript, Groovy  
RESTful Microservice Architecture  
REST API Versioning  
Framework for Standardization of Microservices  
Open Telekom Cloud Environment OTC  
Docker Container into Kubernetes Cloud Environment  
Jenkins CI/CD-Pipelines  
JSON Web Token (JWT), Bearer- Authorization-Header  
Kubernetes Commands and Configuration  
Relational SQL Scripts  
Database Connections and Liquibase Migrations Scripts  
Hystrix latency for Fault Tolerance  
CircuitBreaker, FeignClients, SoapClients  
Quality Tasks with Sonar and Linting  
Multi Maven Projects  
Nexus Artifact Repository  
JSON Data Communication  
Alerting, Health Checks  
Postman, Swagger, OpenAPI  
Testautomation, Performanceanalysis, Resilience  
Cypress and Karma Tests  
Sleuth, Zipkin, Opentracing, Dynatrace  
Monitoring, Security  
Spring Boot, Spring Data, Spring Cloud OpenFeign  
Release and Feature Toggles with trunk-based-development  
Spring Expression Language  
NodeJs JavaScript Backend Development  
JavaScript NodeJs Tests with Mocha and Chai  
Ingress Service Discovery  
NGINX Configuration  
Soap Communication Protocol  
Kubernetes Secrets Configuration  
Semantic Versioning  
Angular State Management with ngs/store, Actions and Reducer  
Angular Material Design UI Components  
DevOps with CI/CD Jenkins Pipelines  
Shell Scripts  
Web Performance Analysis Tools  
Data Exchange with WSDL and SOAP  
JMeter Heavyweight Tests  
Operation of Certification Authority (CA) for PKI  
Usage of Public-Key-Infrastructur (PKI)

Meetings with business domain experts  
 Development of a Court-Software for the German Justice  
 Browser based Court-App as Single Page Application (SPA)  
 Ca. 100 involved Persons in Development  
 Reviews of Sourcecode  
 Coordination of Devs and DevOps Tasks  
 Agile Development in a Scrum Team and SAFe  
 Grooming, Planning, Retrospective  
 Communication in English and German

Realized with:	Operatingsystems	Open Telekom Cloud (OTC) , Windows, Linux
	Datenbases	H2, Oracle, MsSQL, PostGre
	Developmenttools	Eclipse, STS, IntelliJ, Visual Studio Code
	Tools	ArchiMate, LeanIX, Mapstruct, Hazlecast, Java 11, Lighthouse, web.dev, requestmap.webperf.tools, webpack-bundle-analyzer, WebP, Angular 13, Postman, newman, Swagger, OpenAPI, Git, Bitbucket, Jenkins, OTC, Kubernetes, NGINX, Ingress, JMeter, Teams, WebEx, Angular, TypeScript, Groovy, Java, JavaScript, Jasmine, Cypress, Mocha, Chai, Karma, Gherkin, cucumber, mural, xrepository, XJustiz, Sleuth, Zipkin, Opentracing, Dynatrace, Spring Boot, Spring Data, Docker, JPA, Hibernate Envers, LogBack, Log4j2, JWT, Maven, Nexus, Sonar, Lint, Hystrix, H2, Oracle, MsSQL, PostGre, Liquibase, NodeJs, npm, yarn, Checkstyle, curl, JIRA, OWASP, Kubectl, yaml, Notepad++, GraphQL, SASS/SCSS, SmartBear SoapUi, Citrix, SourceTree, SmartGit, Lombok, @angular/material, SQLDeveloper, Nx, ngxs/store, Prometheus, Eclipse, STS, IntelliJ, kibana, Confluence, JIRA, coyo

## Housing-saving Calculator and Taxes

Role: Senior Full Stack Developer

Branche: Finance

References: Co. Fiducia GAD in München/Aschheim

Contact person Mr. Matthias Leukert, Mr Erich Burggraf, Mr. Martin Hahn

<http://www.fiduciagad.de>

from	12/2019	- 08/2021	with	20 months
------	---------	-----------	------	-----------

Angular Single Page Application - SPA  
 12 Microservices for Front- and Backend  
 TypeScript, Java, JavaScript, Groovy  
 RESTful Microservice Architectur

REST API Versioning

Framework for Standardization of Microservices

Red Hat OpenShift Cloud Environment

Red Hat Enterprise Linux (RHEL) Systemadministration

Docker Container in Azure Cloud Environment

JSON Web Token (JWT), Bearer- Authorization-Header

Kubernetes Commands and Configuration

Relationale SQL Scripts

Database connections and Flyway Migrations Scripts

Hystrix latency for Fault Tolerance

CircuitBreaker, FeignClients, SoapClients

Quality with Sonar and Linting

Multi Maven Projects, Gradle Build Scripts

Nexus Artifact Repository

AMQP Messaging - Advanced Message Queuing Protocol

Usage of the Omnikanalplattform OKP

Implementation of Java Banking Framework JBF

JSON Data Communication

Alerting, Health Checks

Postman, Swagger, OpenAPI

Camunda Process-Engine

Camunda BPMN-Workflows and DMN-Decisions

Testautomation, Performanceanalyze, Resilienz

Selenium, Fitnesse, Protractor and Karma Tests

Zipkin, Opentracing, Dynatrace

Monitoring, Security

Spring Boot, Spring Data, Spring Cloud OpenFeign

Release and Feature Toggles with trunk-based-development

Spring Expression Language

NodeJs JavaScript Backend Development

JavaScript NodeJs Tests with Mocha and Chai

Consol Service Discovery

Soap Kommunikations Protokoll

Openshift Secrets Konfiguration

Semantic Versioning

Angular State Management with ngxs/store, Actions and Reducer

Angular Material Design UI Components

Migration towards Angular 11

JQ Json Parser

DevOps with OpenShift CI/CD Jenkins Pipelines

Shell Scripts

Web Performance Analyse Tools

Data exchange with WSDL and SOAP

JMeter Robustness Tests

Developing of a Housing-saving Calculator  
 Enhancement of the Bank Desktop - BAP  
 All kind of taxes sheets  
 REST Interfaces to BAP, KAPST and agree21  
 Meetings with business domain experts  
 Reviews of Sourcecode  
 Dev and DevOps Tasks  
 Remote Communication over Skype and Gotomeeting  
 Agile Development in a Scrum Team and SAFe  
 Grooming, Planning, Retrospective  
 OnlineBanking and VR Banking App  
 Communication in English and German

Realized with:	Operatingsystems	Azure Cloud, Windows, Linux, Ubuntu KDE
	Datenbases	H2, Oracle
	Developmenttools	Mapstruct, Hazelcast, Java 11, miro.com, HashiCorp Consul, Lighthouse, web.dev, requestmap.webperf.tools, webpack-bundle-analyzer, WebP, Angular 11, Postman, newman, Swagger, OpenAPI, Git, Bitbucket, Jenkins, Red Hat OpenShift, Azure, Camunda, Spin, JMeter, IBM Lotus Notes, Teams, GoToMeeting, Angular, TypeScript, Groovy, Java, JavaScript, Selenium, Jasmine, Protractor, Mocha, Chai, Karma, Fitnesse, Zipkin, OpenTracing, Dynatrace, Spring Boot, Spring Data, Kubernetes, Docker, AMQP
	Tools	Messaging, JPA, Hibernate, Log4j2, JWT, Maven, Gradle, Nexus, Sonar, Lint, Hystrix, H2, Oracle, SQL, Flyway, Node.js, npm, yarn, Checkstyle, curl, JIRA, OWASP, Kubectl, yaml, Notepad++, GraphQL, SASS/SCSS, SmartBear SoapUI, Citrix, Telegram, SourceTree, SmartGit, Lombok, @angular/material, SQLDeveloper, ngxs/store, allure, IKESA, VR-NetKey, aqua, Grafana, Prometheus, funretro.io, IntelliJ, consul.io, gson, kibana

## Digital Marketplace - G2M

Role: Full Stack Developer

Branche: Telecommunication

References: Co. Rohde & Schwarz in München

Contact person Mr. Patrick Bauriedl, Mr. Ivan Kostov, Mr. Christ. Maurer

<http://www.rohde-schwarz.com>

from	09/2019	- 12/2019	with	4 months
------	---------	-----------	------	----------

Development of Digital Marketplace Applications

WebShop Development with Angular and NodeJs  
Backend and Frontend with TypeScript and JavaScript  
Packet Manager npm and yarn  
Azure Cloud based PaaS  
Docker based MicroServices  
Docker Compose multi-container solutions  
Harbor Registry for Docker images  
Git Hooks with Husky  
Red Hat OpenShift Pods  
OKD Jenkins Pipelines and Clusters  
Administration of OpenShift Clusters  
OC and Kubectl CLI commands  
Yaml Templates as OpenShift Service Definition  
Azure Service Bus for asynchrones Messaging  
REST API Routes with Versioning  
OpenAPI, Swagger Documentation  
Authentification over SAML Service  
NoSQL Datenbase MongoDB  
Configuration as Code with Jenkinsfiles  
CI/CD Pipeline  
Distributed Tracing, OpenTracing  
OWASP and Licence checks  
CSS Styles and Html Templates  
Jasmine, Karma and Robot Tests  
Test with Robot Framework and RIDE Suites  
Python Scripte for Test Automation  
Sonar and Checkstlye Coverage  
Dev and DevOps Duties  
Development of a generic Webshop  
Shop Extensibility for cloud products  
Go-2-Market Applications - G2M  
Identity and Access Management - IAM  
Remote Communication over GotoMeeting  
Agile, remote Scrum Team  
Grooming, Planning, Retrospective  
Project language English

Realized with:	Operatingsystems	Azure Cloud, Windows, Linux, Ubuntu KDE
	Datenbases	MongoDB, CosmosDB, mySQL

Developmenttools Tools	Red Hat OpenShift, Azure, MongoDB, Docker, Visual Studio Code, Notepad++, Citrix, Chrome DevTools, TypeScript, Angular, Jasmine, Karma, Robot Tests, EsLint, NodeJs, npm, yarn, PMD, Checkstyle, Sonar, JIRA, Docker, Proxyfier, Postman, Hyper-V, VMware, Skype, git, bash, zipkin, jaeger, depcheck, module-structure, retire.js, OWASP, Harbor, CosmosDB, Husky, OKD, OC, Kubernetes, Kubectl, Keycloak, MockServer, Ubuntu KDE, Kate, Dolphin, robotframework, RIDE, Python, pip, MarkdownViewer++, Markdown Extension, json, yaml, JWT, APISimulator, draw.io, Studio 3T, OpenAPI, Swagger
---------------------------	---

## Siemens Corporate Entitlement Service - CES

Role: Full Stack Developer

Branche: Security

References: Co. Siemens in München

Contact person Mr. Siegfried Eichner, Mr. Binh Le Nguyen, Mr. Erik Bergjohann, Mrs. Elena Thiel

<http://www.siemens.com>

from	06/2018	- 09/2019	with	16 months
------	---------	-----------	------	-----------

- Implementation of Spring Microservices
- Spring Boot and Spring Batch Applications
- Spring Core, Security
- Spring Eureka Multi Instanz Architecture
- Spring Cloud Netflix, Eureka, MVC, Thymeleaf
- RESTful Spring Controller
- Angular Frontends development
- Npm and NodeJs
- Java and JavaScript
- Reactive Programming with Typescript
- Json and yml
- Jenkins Release Pipeline with Jenkinsfile
- Groovy Scripts
- Java 8 Functional programming
- JWT (JSON Web Token) for Microservices
- Maven Multi Module Projects
- DevOps Tasks
- Cloud Foundry
- Artifactory Repository
- Git and svn Repositories
- Svn to Git Migration

Introduction of Git-flow Workflow with GitLab  
In-memory data grid performance optimization  
XSS Cross Site Filter for Tomcat  
PKI Infrastructure  
Public Key, private Key communication  
One Time Password - OTP  
OpenID, Single Sign On - SSO  
Security Assertion Markup Language - SAML  
DirX and LDAP lookup  
Windows Active Directory Configuration  
Active Directory-Certification Service (AD CS)  
Apache Load balancing  
Tomcat Web Applications  
Shell Script programming  
Sonar for static code analyse  
OWASP Security Findings  
HTML5, CSS  
Spikes for Kotlin and Scala  
Kundenaccounts with Single Sign On  
Authentication / Authorisation  
Segregation Of Duties – SoD  
Agile Story Planung with JIRA  
Smartcard PKI Login  
Secure Coding  
Protection Requirements Assessment PRA  
User Management  
2-Factor Authentication  
Process definitions  
Coordination and Bug Tracking  
Agile Development with Scrum and Kanban  
Grooming, Planning, Retrospektive  
Remote communication over Circuit  
Project language Englisch  
Partly remote team

Realized with:	Operatingsystems	Windows, Linux
	Database	Oracle, H2, mySQL

Development tools	Microsoft AD, AD CS, Visual Studio Code, Eclipse, STS, Java, Kotlin, Scala, Mockito, RxServer, Netty, Lombok, Cucumber, GitLab, YAML, Portecle, Ansible, JWT, Retire.JS, Git, svn, bash, Tomcat, Jetty, Entrust, Syncplicity, Splunk, Circuit, Subclipse, LDAP, DirX, X.509, WinSCP, puTTY, puTTYGen, Groovy, SQuirreL, eclEmma, cron jobs, Remedy, repIT, Lucidchart, Postman, ssh, ssl, Oracle, H2, Kanban, DevOps, Mailversand, Swagger, Netflix, Hystrix, Ribbon, Cobertura Code Coverage Report, cacerts, keytool, UML, ant, pageant, PMD, Checkstyle, Findbugs, Spotbugs, Sonar, Fiddler, SiMPL, Yo, npm, node, OWASP, jSoup, JIRA, conceptboard
-------------------	--

## Financeportal for public financing - PIF

Role: Full Stack Developer

Branche: Bank, Fintech

References: Co. Dt. Pfandbriefbank/Capveriant in Munich/Unterschleißheim  
Contact person Mr. Benedikt Girz, Mr. Sergiy Barlabanov

<http://www.pfandbriefbank.com>

<https://www.capveriant.com>

from	11/2017	- 05/2018	with	7 months
------	---------	-----------	------	----------

Java Microservices Architectur

Spring Boot, Spring Data

Java, JavaScript

Single Page Application

Angular Web-development

RESTful Interface

Frontend Tests with Protractor

JUnit Tests with Karma

Pacet Manager npm

Node.js non-blocking Runtime Engine

Distributed Source control with Git

Azure Cloud solutions

Automated ARM Templates

Azure Storage Account

Azure KeyVault Certificates

Powershell Azure Scripts

Setup of VSTS Build Pipeline

Automated Deployments with VSTS

VSTS for Tickets/Tacking

Multilanguage Application

Automatic E-Mail sending

SSL/HTTPS Certificates  
YAML and JSON Dataformats  
JSON Web Token JWT  
Security Access Token  
PaaS, SaaS as a Service  
Kubernetes Container based Deployment  
Docker for Container virtualization  
MsSQL Docker Image creation  
Transact-SQL (T-SQL) Scripts  
Daten Migration with Flyway  
Maven Build Management  
DevOps tasks  
Bash shell and Unix Scripts  
Spike for Scala  
Finanzportal for public financing  
Complete new Development with a remote team  
Agile Development with Scrum and Kanban  
Grooming, Planning, Retrospective  
Remote communication over TeamViewer, Skype, Slack  
Project Speach Englisch  
Offshore Team

Realized with: Operatingsystems	Windows, Linux
Database	Microsoft SQL Server, H2, HSQL, mySQL
Developmenttools	Azure, Node.js, bash, npm, Eclipse, IntelliJ
Tools	IDEA, Visual Studio Code, Angular 5, JavaScript, ES6, Eslint, Java8, Scala, Spring Core, Spring Data, JPA, Hibernate, Mockito, REST, Json, Maven, Notepad++, CSS, sublime, SMTP, logback Logger, Putty, ssh, scp, Skype, Slack, Teams, Ubuntu VM setup, CSRF, Chocolatey Paketmanager, TCPView, MSSQL Server, ARM Automatic Resource Management, ARM Azure Resource Manager, DMA Data
	Migration Assistant, SSMS SQL Server Management Studio, SSMA SQL Server
	Migration Assistant, Team Foundation Server (TFS), Visual Studio Team Services (VSTS), Git, Flyway, MsSQL, MySQL, Office365, zeplin.io, Lucidchart, linoit, Typo3 Script Bitnami, PrimeNG Rich UI Web Components, Postman, cURL, ModelMapper, querydsl, Bitnami
	Matomo/Piwik, Apache FreeMarker, Spring Quartz, GreenMail, ssh, ssl

Development tools	Azure, Node.js, bash, npm, Eclipse, IntelliJ
Tools	IDEA, Visual Studio Code, Angular 5, JavaScript, ES6, EsLint, Java8, Scala, Spring Core, Spring Data, JPA, Hibernate, Mockito, REST, Json, Maven, Notepad++, CSS, sublime, SMTP, logback Logger, Putty, ssh, scp, Skype, Slack, Teams, Ubuntu VM setup, CSRF, Chocolatey Paketmanager, TCPView, MSSQL Server, ARM Automatic Resource Management, ARM Azure Resource Manager, DMA Data Migration Assistant, SSMS SQL Server Management Studio, SSMA SQL Server Migration Assistant, Team Foundation Server (TFS), Visual Studio Team Services (VSTS), Git, Flyway, MsSQL, MySQL, Office365, zeplin.io, Lucidchart, linoit, Typo3 Script Bitnami, PrimeNG Rich UI Web Components, Postman, cURL, ModelMapper, querydsl, Bitnami Matomo/Piwik, Apache FreeMarker, Spring Quartz, GreenMail, ssh, ssl

## **Logistic for yard management - flow**

Role: Full Stack Developer

Branche: Logistic

References: <http://www.43gis.com>

Co. 43gis in Munich.

Contact person Mr. Torsten Oltmanns, Mr. Clemens Weber

from	03/2017	- 10/2017	with 8 months
------	---------	-----------	---------------

Microservices Architecture

ReactJs frontend development

Spring 4 and Java 8 backend development

Single Page Applikation implementation

Workflow implementation for State machine

Redux Datastore connection

REST communication

Ajax and Promises Callback communication

NodeJs and npm development

Websocket Endpoint Messaging

EsLint for code quality

implementation of transactional Spring components

Persistence with Hibernate

Data migration

SCM with Git and Gogs

Unit and integration tests  
Jenkins Build control  
JBoss, Wildfly Application Server  
gradle and Maven build control  
Certified Scrum Master PSM  
Remote teams, Nearshoring  
JIRA, confluence  
Skype, TeamViewer  
asterisk telefon conferences

Realized with:	Operatingsystems	Windows, Linux
	Database	Oracle
	Developmenttools	NodeJs, npm, ReactJS, JavaScript, Mocha, ES6, JSX, Redux, PhantomJS, Jest, enzyme, sinon, Lerna, karma, Lanterna, EsLint, Java 8, Spring Core, Spring Data, JPA, Hibernate, Mockito, JMX, Git Bash, Gogs (Go Git Service), Jenkins, TeamViewer, REST, Json, Postman, SQLDeveloper, ORACLE, MSSQLServer, iBatis+Liquibase DB Migration, Eclipse Neon, JBoss, Wildfly, Gradle, Maven, artifactory, Visual Studio Code Editor, sublime, Atom, Notepad++, JSP, JQuery, HTML, CSS, OpenLayers, jacoco, Skype, Confluence, JIRA, Jing, Nagios, Bizagi Modeler, Bamboo Paper, XMind Mindmapper, realtimeboard, linoit, Scrum
	Tools	

## **Vehicle calculator for classic cars - ANDIE**

Role: Full Stack Developer

Branche: Insurance

References: <http://www.aioinissaydowa.eu>

Co. AIOI in Munich/Ismaning.

Contact person Mr. Martin Brauner.

from	10/2016	- 03/2017	with 6 months
------	---------	-----------	---------------

Angular frontend development  
Spring backend development  
Development with Java 8 language features  
REST call interface with Promises and Observables  
Asynchron client/server communication with callbacks  
Cross-Origin Resource Sharing (CORS) implementation with Spring  
Protection against Cross Side Scripting (CSRF) with Spring  
Grunt and Maven as Build Tool  
Project modularization in Node.js, npm submodule  
JSON and YAML file formats  
Usage of HTML5 and CSS

- Protractor E2E Tests
- Jasmine Test Framework
- Selenium Web Driver Tests with PhantomJS
- Oracle VirtualBox for Vagrant virtualization
- Migration with Postgre database scripts
- Complete new development in small team
- Tariff calculation of car insurances for end customers
- Customer registration with Double-Opt-in
- Automated E-Mail delivery
- Confluence Jira for communication
- Process model with Scrum Team
- Communication with Test Team

Realized with:	Operatingsystems	Windows, Linux
	Database	PostgreSQL
	Developmenttools	Flyway, Mockito, EasyMock, TSLint, Balsamiq, Hibernate, Node.js, npm, Firebug, VS Code, CSS, HTML5, SonarLint, Spring Data, Spring Core, Spring Boot, GitHub, Angular2, Apache Commons, Docker, Vagrant, Jing, JIRA, Confluence, Json, YAML, SoapUI, Log4j, git, mvn, SourceTree Git Browser, Nexus, Jenkins, REST, JPA, DBeaver, PostgreSQL, Eclipse, STS, Java 8, putty, WinSCP, Notepad++, subethasmt
	Tools	

## Telephone Number Porting with Java EE

Role: Backend Developer

Branche: Telecommunication

References: <http://www.consol.de>

Co. ConSol in Munich.

Contact person Mr. Thomas Michal, Mr Andreas Berger.

from 04/2016 - 10/2016 with 7 months

- EJB backend development
- Webservice REST Client/Server communication
- Angular2 web development with TypeScript
- TypeScript as abstraction for JavaScript
- Migration von EJB 2.1 nach EJB 3.0
- Spring data for JPA repository access
- TestNG components tests
- Oracle WebLogic Application Server
- Oracle PL/SQL Stored Procedures
- RMI - Remote Method Invocation
- Workflow engine

MSISDN migration over staging tables  
JavaScript development  
Node.js and npm for packages and modules management  
JPA entity development with EclipseLink  
Java 8 language features  
Jenkins continues integration job administration  
Citrus integrations tests  
Maven multi project profile  
Data migration of mass data  
x.400 gateway and 2MRDB porting  
CORBA Tuxedo connector  
CORBA IDL  
Scrum Master tasks  
Telephone number porting  
Import and export of telephone numbers for prepaid- and postpaid brands  
Starter Pack SIM migration  
Git branching strategies and pull requests  
Atlassian tool suite for communication  
Confluence Jira for processes  
Bugtracking over ClearQuest  
Load-tests  
Realization within a scrum team  
Coordination with domain experts  
Communication with test-team

Realized with:	Operatingsystems	Windows, Linux
	Database	Oracle 11
	Developmenttools	Eclipse, IntelliJ
	Tools	Flyway, MyBatis Migration, Mockito, EasyMock, Hibernate, maven-replacer-plugin, Node.js, npm, Broccoli Plugin, TypeScript Eclipse Plugin, Firebug, VS Code, SonarLint, TestNG, Spring Data, Atlassian Suite, Bitbucket, Confluence, JIRA, HipChat, ClearQuest, ClearQuest, GitHub, AngularJS, Apache Commons, Docker, Jing, JIRA, Confluence, Json, Log4j, Citrus, git, mvn, ant, Nexus, Jenkins, Oracle WebLogic, SoapUI, REST, JPA, SQLDeveloper, ORACLE, Eclipse, Java 8, putty, WinSCP, Notepad++

## Multiple Assembly Planning & Process System - MAPP

Role: Backend Developer  
Branche: Automotive

References: <http://www.gigatronik.de>

Co. Gigatronik in Munich.

Contact person Mr. Stefan Hanel, Mr. Michael Voitenleitner.

from	09/2015 - 03/2016	with	7 months
------	-------------------	------	----------

EJB development  
Webservice REST Client/Server communication  
JPA entity development with EclipseLink  
JPA criteria API  
Java 8 language features like Lambdas  
Aspect oriented interceptors  
DB modeling  
Jenkins continues integration job administration  
JUnit Mockito tests and integrationtests  
Maven multi project profile  
Usage of JRebel  
JSON data exchange format  
Data migration  
JavaFx client development  
JavaFx design with scene builder  
Glassfish configuration  
LDAP connection  
SONAR metrics  
FitNesse tests  
Generic realization of MAPP for car production and planning of BMW vehicles  
Part project coordination  
Coordination with domain experts  
Communication with Test-Team  
Organization development meetings  
'Clean Code' principles  
Implementation and technical realization  
Senior developer  
Scrum Master tasks

Realized with:

Operatingsystems	Windows, Linux
Database	Oracle 11
Developmenttools	SezPoz, Apache Commons, Jing, Jersey, Json,
Tools	Log4j, EclipseLink, MQ, JRebel, mockito, SVN, mvn, FitNesse, Nexus, Jenkins, Sonar, Jubula, Glassfish, REST, JPA, SQLDeveloper, ORACLE, Eclipse, JavaFx, JAutodoc, LDAP, ScenicView, SceneBuilder, Java 8

**Online portal for ambulant, medical services - OPAL Web-Application**

Role: Backend-, Frontend-Developer

Branche: Health Insurance

References: <http://www.kvb.de>

Co. KVB in Munich. Contact person Mr. Matthias Geiss.

from 09/2012 - 07/2015 with 35 months

Development of the online portal OPAL  
Extension of existing service interfaces  
Spring Core for Dependency Injection CDI  
Spring Web Flow for page navigation  
Spring Restful Webservice implementation  
Spring authentication and authorization  
Browser plausibility with JavaScript  
Buildmanagement with Gradle Buildscript in Groovy  
Continues Delivery with FeatureToggles  
Dynamic configuration of features with Framework 'Togglz'  
Webservice requests with SoapUI  
Agile DB migration with flywayDB  
Programming with Java 7  
Creation of SQL Scripts  
Serverside validation with Rhino Script Engine  
XSLT transformation of data to Sciphox and EHD format  
Further development of the JSP pages  
WebTests with JUnit and Selenium Browser Plugin  
Configuration of Jenkins Jobs for CI, NB and INT environment  
Timeline versioning of business change requests  
Usage of Jenkins plugins  
Configuration of Jenkins Jobs for CI, NB and INT environment  
Usage of Gradle and Maven as build tools  
Release management with maven release plugin  
Assembling and deployment with maven  
Maintainance of data in integration  
Development of ORACLE SQL statements for ABN and Production  
Defining of SQL scripts for DB handover process  
Maintainance of data with PL/SQL scripts  
File exchange formats .json and .yml  
Asynchron processing over ONDES and KV-Connect interface  
Test Driven Development - TDD  
WebTests with JUnit and Selenium browser plugin  
Load Tests of Webservices with SoapUI  
Threading and Web Load-Tests with LoadUIWeb  
Remote access via Secure Shell (SSH) and odin  
Documentation of medical reports in the online portal (OPAL)  
Submission of electronic documentation to the KVB  
Export of data to Sciphox xml format

Support of the following medical documentations:

Allergologie, Balneophototherapie, Belastungs-EKG, Darmkrebsberatung, eDMP, DMP-Brustkrebs, Hautkrebsscreening, Koloskopie, Multiple Sklerose,

Risikoprävention bei Kinderwunsch, Schmerztherapie, Sonografie

Schwangerschaftsvorsorge, Tonsillotomie, Gastroskopie, Onkologie

New development of medical documentations like Hörgeräte, Molekulargenetik and Sozialpsychiatrie

Extension of the online documentation OPAL for medicians

Scrum with Daily Standup and Retrospective

Realized with: Operatingsystems	Windows 7, Linux
Database	Oracle 11g
Developmenttools	J2SE 7, STS - Spring Tool Suite, Kepler Eclipse
Tools	Java EE IDE for Web Developers, Tomcat 7, Jenkins Flow Plugins, Flyway, WinSCP, putty, Nexus, SONAR, ONDES, KV-Connect, Linux, PdfBox, Lombok, Gradle, Groovy, Spring MVC, SoapUI, Feature Togglz, Secure Shell (SSH), TLS, SSL, Burp Proxy, FoxyProxy, Hamcrest, Confluence, odin, DbSetup, flywayDB, maven release plugin, LoadUIWeb, Java 7, JavaMelody, xml-unit, JDedend, Spring Core, Spring Web Flow, Oracle SQL Developer, EJB 3.1, JPA, CriteriaAPI, SVN, Subclipe, Subversive, Tortoise, Firebug Firefox Addon, Selenium Plugin, Live HTTP headers Firefox Addon, EclEmma Eclipse Addon, CheckStyle, Maven, Tomcat, JUnit, XSLT, HttpUnit, DbUnit, Jenkins, joda-time.jar, jQuery, JavaScript Rhino Engine, JavaScript

## Web Wiki/Community Angeln.de (Fishing website)

Role: Backend-, Frontend-Developer

Branche: Softwarehouse, Startup Company, Printmedia

References: <http://www.angeln.de>

<http://www.woont.com>

Co. Woont in Munich. Contact person Mr. Dirk Wermuth.

from 10/2011 - 08/2012 with 11 months
---------------------------------------

Complete relaunch in a small team

Development of a Social-, Community-, Shop- Web-Application

Implementation of various Web-Applications around www.angeln.de

Web-Frontend, Shop, Editor and Admin realized as Web-Apps

Integration of social networking pages, linkage to other Web-Apps of the domain

Data import with SQL scripts and java importer

Development with Glassfish, Embedded Glassfish and Embedded Jetty  
Creation of generic, reusage of Ajax Wicket components  
Extensive development of Ajax components for Web 2.0  
Searching and sorting of datatables with Ajax  
Usage of tables with paging navigator and ListView  
Programming of image galleries with DataViews  
Dynamic menus with changing contexts  
Working with Wicket IModel variations like PropertyModel and CompoundPropertyModel  
Layers Design Pattern - Design and call of interfaces to the backend  
Implementation of SEO (Search Engine Optimization) techniques  
Localized URL generation in various languages  
Persistance layer with EJB, JPA and Criteria API  
Geolocating of addresses with EJB Timer Bean  
Google Maps integration with JavaScript Google API  
Bean validation over various layers using JSR 303  
Maintainance of the persistence service  
Schema maintainance and enhancements for the database  
Implementation of image and logo uploads  
Cropping and converting of images with ImageMagick API  
Image converting using im4java API for various web formats  
Usage of Maven Multi Modules with personalized profiles  
CSS adjustments and CSS generation using less compiler  
Bug tracking system OTRS  
Continues integration and nightly build using Jenkins  
Spring Dependency Injection Integration DI  
CSS and JavaScript development and debugging with Firebug plugin for Firefox  
Usage of EclEmma coverage eclipse plugin  
Generic programming using java generics  
Consequent usage of JUnit regressions tests, standard technologies and standard tools for development

Realized with: Operatingsystems    Windows 7, Linux, Ubuntu

Database                      PostgreSQL 9

Developmenttools	J2SE 6, Eclipse 3.6.2 Helios, Glassfish
Tools	Embedded, Glassfish 3.1.1, Embedded Jetty
	EJB 3.1, JPA, CriteriaAPI, Apache Wicket 1.5,
	Eclipse, SVN, Subclipse, Subversive, Firebug
	Firefox Addon, Live HTTP headers Firefox
	Addon, PrefBar Firefox Addon, AnyEdit Eclipse
	Addon, EclEmma Eclipse Addon, Maven,
	glassfish, Tomcat, Jetty, JUnit, Selenium,
	Jenkins, PMD, FindBugs, joda-time.jar,
	guava.jar, Skype, SQuireL SQL, PostgreSQL
	DB, gforge, tickspot, MindMap Freeplane,
	im4java, ImageMagick, GraphicsMagick, jQuery,
	less, JCrop, OTRS, Facebook, Twitter,
	YouTube, Google Maps API, fancyBox

## **JEE Tariff Calculator and Webservice**

Role: Backend-, Frontend-Developer

Branche: Insurance

References: <http://www.lv1871.de>

Co. LV1871 in Munich. Contact person Mr. Alexander Gold.

from	07/2009 - 07/2011	with	25 months
------	-------------------	------	-----------

Relaunch/Development of the existing Tariff Calculator software with Apache Wicket Framework

Development/Maintainance of the existing Tariff Calculator software with Apache Struts

Components with usage of Wicket HTML markup inheritance development

Development of advanced Gui functionality beyond the Wicket Extensions (like "close button" on tabulators)

Wicket Ajax component development

Development of company web based components

CSS and JavaScript development and diagnosis with Firebug Plugin for Firefox

Generating of path notation with 'bindgen' utility and @Bindable annotation for type save Wicket ID's

Extension handler for XStream and Castor marshallers for object to XML generators  
Implementation of the BiPRO insurance webservice standard

Schema validation and WSDL generation

Design of complex element inheritance in XSD schemas

Usage of JAX-WS webservice framework

JAXB XML marshalling resp. XML serialization to java

Generic programming because of java generics usage

Loadtests with SoapUI against the webservice implementation

Design of the technical and logical validation of the webservice

Development of various XML namespaces

Implementation of various insurance tariffs

Extensions on the existing tariff software  
Maintainance of the productive platform  
PDF generation with Apache FOP  
XSL transformation in several steps up till to printable XSL-FO documents  
Strict validation of XSL templates and XSL-FO elements  
Integration of the printable XSL-FO documents into the webapplication  
Refactoring of the exception handling  
Maintainance of the intranet and Wiki  
Consistent Usage of JUnit regression tests, standard technologies and standard tools for development  
Spring integration  
Usage of Core Spring for better Testing  
Usage of various JEE / J2EE Pattern like SessionFacade, ServiceLayer, Transfer Object Assembler, DTO, DAO, ...  
COBOL \*.cpy integration, calls to tariff calculator cores  
Automated XML printjobs  
Implementation of 'lucene' search engine functionality  
Usage of EclEmma Coverage Eclipse Plugin

Realized with:

Operatingsystems	Windows 7, Windows Vista, Windows XP, Linux, AIX
Database	HDB, DB2
Developmenttools	J2SE 6.0, Eclipse 3.x, Jetty6, Tomcat6, Live
Tools	HTTP headers, Firebug, Citrix, STS, Subversion, SVN, CVS, WinSCP, PuTTY, Extreme Planner, Firefox, Opera, Safari, Windows 7, Windows Vista, Windows XP, commons beanutils, xalan Parser, xerces Parser, JUnit, httpUnit, Spring, Bindgen, ant, maven, Jenkins/Hudson Nightly Build Tool, Emma Test Coverage Frameworks, JAX-WS Webservice Framework, SoapUI, UML Enterprise Architect, XMLSyp, Notepad++, Bouncy Castle Cryptography Library, JDom, xstream serialize XML, Apache Struts, Apache Wicket, Apache log4j, Apache FOP, BiPRO, JAXB, WSDL2Java, cygwin

## Smartphone Web and App Development

Role: Backend-, Frontend-Developer

Branche: Entertainment

References: [http://www.androidzoom.com/android\\_applications/trivial+dice/by\\_matching](http://www.androidzoom.com/android_applications/trivial+dice/by_matching)

<http://www.m.hopf-it.de>

from	09/2010 - 10/2010	with	1 month
------	-------------------	------	---------

Web app Development for Smartphones

Usage of iui - User Interface (UI) Framework from Google  
Development of the own homepage in mobile format  
Development of a Simple dice which rolls in 2D graphic, if you tap the screen  
Game development: Trivial Dice  
Conception of the layout  
Design of the graphic  
Development of the statemachine  
External event handling  
Consideration of different resolutions  
Testing of various devices with emulator  
JUnitTest suite for the App  
Lite version with reduced feature set  
Pro version with different access rights  
Playing of audio file  
Familiarization with the Anroid SDK and Google iui, JQTouch Framework  
Multi lingual description  
Versioning in Android Market

Realized with:	Operatingsystems	Windows 7
	Database	-
	Developmenttools	J2SE 6.0, Eclipse 3.x, Google iui Framework,
	Tools	JQTouch Framework, Android SDK, Eclipse
		Plugin, JUnit

## **JEE Webapplications for Ring Back Tones**

Role: Backend-Developer

Branche: Telecom

References: <http://www.ect-telecoms.de>

Co. ect-telecoms in Munich. Contact person Mr. Robert Parkes, Mr. Hans Huber, Mr. Ahmed Ferdous.

from 09/2008 - 06/2009 with 10 months

Creation of web applications with Tomcat, JSP, Spring and Hibernate  
HTTP Authentication with Basic and Spring XwsSecurity method  
Porting respectively migrating the integration layers from Oracle to HSQL database  
Porting of Oracle schemas and data to HSQL database  
Realization of a standalone reference web client as a presentation application  
Implementation of a Soap Services with JAXB to upload binary content  
Configuration of ant scripts and make them runnable under LINUX and Windows  
Extension of the Soap core component with new features  
Publishing the new features as web service  
Porting the Codehouse XFire web service architecture to Spring WS respectively Apache CXF Framework  
Mobile Communication over USSD Service Codes and XML-RPC.  
MDA UML transformation to XSD

XSD schema definition for automatic generation of the model and soap classes  
JAXB XML marshalling respectively XML Serialization to Java  
Basic Apache webserver configuration  
Remote installation and deployment onto customer servers  
Creation of Spring, maven and ant configurations  
Error tracking with Jira as bug tracking system  
Initialization and introduction of Apache Continuum as Nightly Build process, JUnit  
Tests, Nightly Build, SVN Tags and Branches, measure of test coverage, Intranet  
Wiki.  
Load tests for Soap web services with soapUI  
jUnit regression tests  
Consequent usage of JUnit regression tests, standard technologies and standard  
tools in the development  
Team communication and documentation completely in English

Realized with:

Operatingsystems	Windows; Linux
Database	Oracle, HSQL
Developmenttools	J2SE 5.0, GIMP PictureEditor, ColorZilla
Tools	Colorpicker, FireFTP, Notepad++, Cygwin, HSQL, ORACLE10g, Eclipse 3.4, Tomcat5.5, Live HTTP headers, SQuirreL DBViewer, SQLDeveloper, SQLPlus, DbVisualizer, VNC, 7-Zip, Tortoise, Subversion SVN, WinSCP, PuTTY, Jira Bugtracking, Clearspace, Thunderbird, Firefox, Ace WINScreen, Windows XP, Linux Ubuntu, Spring, Hibernate, ehcache, OSGi, commons, myfaces, xalan, xerces, JUnit, httpUnit, ant, maven, Codehouse XFire, Apache CXF, XML-RPC, redstone XML-RPC library, GSM Services, EMF (Eclipse Modelling Framework), GMF (Graphical Modelling Framework), SOAP, Spring WebService, jstl, acegi security, JavaScript, JavaScript Debugger Venkman, clover and emma test coverage Frameworks, Apache CXF Webservice framework, soapUI, UML Enterprise Architect, StarUML

## **J2EE accounting system for health insurance (nPROD)**

Role: Developer

Branche: Health Insurance

References: <http://www.azh.de>

Co. VSA/azh in Munich. Contact person Mr. Weber, Mr. Herrmann.

from 04/2006 - 08/2008 with 28 months

New product development of an automatic accounting system for health- and auxiliary material

Analysis and design with UML 2.1

Requirement analysis and review with business and domain experts

Use Case description with the CASE Tool MagicDraw

MDA usage for the persistence layer

Usage of a persistence framework (Marvin) for the modelling of the DB

Modelling of GUI workflows with the CASE Tool MagicDraw

Usage of a GUI workflow framework

SWING masks with GridBagLayout

Extensive usage of CVS (Tagging, Branching, Merging)

Rule based approach for frequently changing requirements

Migration of the project to the Spring application framework

Migration of the existing data to the new structure using CSV files

Adaptation of the data structures for the data import

Data import from ABDA pharmacy position data

Electronic data exchange (DTA) with health insurance company

JUnit-Tests for the business logic and the GUI

Quality ensured with 80% JUnit test coverage and CheckStyle coding conventions

Maintainance and rollout

Attendance of the project from begining to the end (product version 1.0)

Incrementell approach on database changes with update scripts

Practical experience with a reference database

Automatic price calculation for diverse health insurance funds in southern germany

Tasks: master data, price calculation, prescription position management, master agreement, DTA key management.

Development of an account software nPROD for automatic recipe prosessing.

Communication with an understaffed domain department.

Quality enhancement with coupling- and dependency metrics

Realized with: Operatingsystems Windows

Developmenttools Tools	J2SE 5.0, Eclipse 3.3, Jbossrules, Drools Regel-Engine, RuleEngine, Castor as XML Mapper, Clover for Testcoverage, JUnit for Programtests, CheckStyle, ANTLR (ANother Tool for Language Recognition) Parser Generator, Ant, JReport Presentationtool/FOP, Marvin proprietary Persistence Framework and Spring Persistence Framework 2.0, GUI Workflow Framework, IntelliJ 4.5, Jboss 4, MagicDraw 14, DB2-Client 7.2.0, Citrix Emulator, DBVisualiser, Toad, Sqirrel, SQL Workbench, WinCVS 2.0, TortoiseCVS, Firefox, Thunderbird, Nvu (Html-Editor), cygwin Unix Emulator, PuTTY, WinSCP
---------------------------	--

## J2EE WebShop

Role: Developer

Branche: eCommerce

References: <http://www.publicWEBshop.com>

from 12/2005 - 02/2006 with 3 months
--------------------------------------

Webapplication to run an online web shop.

Generic webshop for all kinds of businesses.

Freely configurable with many settings and preferences.

JSF Technologie, Apache MyFaces/Tomahawk .

Axis WebService JAX-RPC interface for B2B SOAP communication.

EJB, JSP and Servlets.

Struts and tiles.

Apache Commons.

AJAX asynch. communication on the client tier.

Object persistence with Hibernate.

Struts and tiles.

Logging with Log4j.

JavaScript and cascading stylesheets (CSS).

Planning and maintaining of a MySQL database.

UML analysis and design.

XML for configuration files.

Multilingual for international purpose.

HTML, XHTML and Flash as presentation technique.

Tests with Jakarta JMeter and JUnit.

Future: XSLT and XSL-FO for PDF generation.

Future: EJB/JBoss/Spring.

Realized with: Operatingsystems Windows, Linux
--

Developmenttools Tools	Eclipse 3.1, Enterprise Architect, XMLSpy Enterprise Edition, JBoss, Tomcat 5.5, Struts, Ant, JUnit, Macromedia Flash and Dreamweaver, div. Eclipse Plugins, MySQL 5
---------------------------	---

## Trainings and Consulting

Role: Developer

Branche: All areas

References: here are the biggest companies:

- Co. SUN Microsystems in Munich. Contact person Mr. Hettmannsberger.
- Co. Accenture in Munich. Contact person Mrs. Steffen.
- Co. Hilf in Oberhaching/ Munich. Contact person Mr. Hilf.
- Co. AS Systeme in Stuttgart. Contact person Mr. Buehler.
- Co. Tria in Munich.

from 04/2004 - 11/2005 with	19 months
-----------------------------	-----------

J2EE

EJB, JSP and Servlets.

Java , SWING.

Webapplications.

EAI integration with differant interfaces.

Message queue connetions over JMS api.

Webservices and SOAP.

JAX-RPC.

UML analysis and design.

XML and XSLT.

J2EE and GOF design pattern.

UML for embedded systems.

OOAD object oriented techniques.

XML and XSLT.

Xalan and Xerces parser event processing.

Developing of course scripts.

Englisch courses.

Realized with: Operatingsystems	Windows, UNIX Solaris
Developmenttools Tools	Eclipse 3.0, NetBeans, JBuilder, Rational XDE and Rose 7.5, Together Controll Center, Poseidon, Enterprise Architect,, XMLSpy Enterprise Edition 2006, SUN ONE, BEA, JBOSS, Tomcat, Struts, Ant, JUnit, XDoclet, div. Eclipse Plugins, JAD Decompiler, Obfuscation, Xalan and Xerces Parser, Pointbase, MySQL, Cloudscape

## Java-COM Bridge over JNI

Role: Developer

Branche: Insurance

References: Kassenärztliche Vereinigung Bayern (KVB) in Munich.

Contact person Mr Dietl.

from 02/2004 - 03/2004 with 2 months

Refactoring and Reengineering of an existing JNI Interface.

Java Native Interface (JNI)..

Realisation with java and C++.

Analysis and design of the existing interfaces.

Changing the interfaces from synchron to asynchron.

Design of the asynchronous communication model .

UML analysis and design.

Use of GOF design pattern .

J2EE integration of JBoss with MS Office.

JNI API for distributed objects, realised in C++.

ANSI C and C++.

Documentation.

Consulting and project leadership.

Coaching of the employees.

Realized with: Operatingsystems Windows XP

Developmenttools JNI, COM, Visual C++ 6.0, Eclipse 3.0, JBoss,  
Tools Centro and JACOB JNI Tool

## Consulting, Trainings and Courses

Role: Developer

Branche: All areas

References: here are the biggest companies:

Co. SUN Microsystems in Munich. Contact person Mr. Hettmannsberger.

Co. Soluzione in Munich. Contact person Mr. Roda.

Co. Hilf in Oberhaching/ Munich. Contact person Mr. Hilf.

Co. New Horizon in Hamburg. Contact person Mrs. Schmitt.

Co. Bosch in Lohr and Hildesheim.

Co. Amatech in Germering.

from 10/2001 - 01/2004 with 27 months

J2EE

Workshops for the whole Java certification program.

Java Workshop.

Webapplications and E-Commerce architectures.

EJB, JSP and Servlets.

C#.

UML analysis and design.

XML and XSLT.

Microsoft MCSD courses.  
 ASP and .NET.  
 ANSI C and C++.  
 Using modern presentation tools.  
 Developing of course scripts.  
 English courses.

Realized with:	Operatingsystems	Windows, UNIX
	Developmenttools	Visual Studio 6.0, Eclipse, NetBeans, JBuilder,
	Tools	Rational XDE and Rose 7.5, Together Control Center6, .NET, SQL Server, XMLSpy, SUN ONE, BEA, JBOSS

## Internet application for a billingsystem

Role: Developer

Branche: Bank, Billingsystem

Referees: Landeszentralbank (LZB) Bayern in Munich. Contact person Mr. Stuckmann.

from	05/2000 - 09/2001	with	17 months
------	-------------------	------	-----------

Analysis and design with UML and Rational Rose.  
 Refactoring, Reengineering of UML Models, realized with Java and C++.  
 Generic modelling with RUP. Generation of artifacts.  
 JavaBeans and serverside Enterprise JavaBeans development.  
 XML documents with Schema specification.  
 JSP pages and Java Servlets development.  
 Java Script programming for all browsers.  
 Webapplications and Webcomponents.  
 JSP Engine configuration and support.  
 C++ Framework development with STL.  
 JNI API for distributed objects in C++.  
 Crypt with Legacy Systems from RSA and PKI.  
 Webserver IPlanet and IIS configuration and administration.  
 Complex SQL-Queries.  
 SWIFT SIPN and InterActBrowse connection.  
 SWIFT Webstation support and configuration.  
 Performant PL/SQL-procedures.  
 Administration of ORACLE database.  
 Team-Software development with versioning-software Merlin.

Realized with:	Operatingsystems	Windows NT 4.0, IIS WebServer
	Developmenttools	Visual C++ 6.0, JBuilder 3.5
	JSP Engines	Apache TomCat, Allaire JRun 3.1
	Databases	ORACLE 8.x, DB2

Emulations, Tools	Rational Rose 7.5, Telnet, FTP, SQL-ODBC-Viewer, SWIFT Webstation
Interfaces	JNI, XML, SWIFT-SIPN

## Administration and support of a Stock-Trayding and Portfolio-System

Role: Developer

Branche: Bank, Stock

References: Co. FMIS - Hypovereinsbank in Munich. Contact person Mrs Stern.

from 02/99 - 03/2000 with 13 months
-------------------------------------

Administration of stock transactions.

Developing of ORACLE databaseprocedures.

Coordination of projects.

Stockorder validation: orderentrance, routing to the stock markets and protocolling in ORACLE databases.

Developing of automatic flows to store new customers.

Implementing and coordination of the „Erträgnisaufstellung/Jahressteuerbescheid“.

Objectoriented interfaceprograming to BossCube and Xetra

Interfaceprograming between UNIX and AS400.

Objectoriented progaming of Stockedit GUI's.

Complex SQL-Queries.

Performante PL/SQL-prozedures.

Support of Windows programs for Broker-Controlling.

Support of Customerdata.

Administration of emmissionen.

Daily Stockbuisness.

Year 2000 exchange.

32 Bit exchange.

Realized with: Operatingsystems	Windows NT 4.0, UNIX Sun Solaris
Developmenttools	Visual C++ 5.0, Centura SQLWindows 1.5
Databases	ORACLE 8.x, 7.x, SQLBase
Emulations, Tools	Hostlink, Unixlink, Telnet, FTP, SQLTalk, SQLPlus.
Interfaces	BossCube, Xetra.

## Developing an Internet-Applet for Credit Scoring

Role: Developer

Branche: Finance and Insurance

References: Co. NSE in Munich. Contact person Mr. F. Nerb.

from 05/98 - 02/99 With 10 months
-----------------------------------

Internet Applet and Server for a Bausparkasse.

Client/Server application for usage within WWW.

Customerown objectoriented classlibrary (ROI -> CORBA-subamount).  
Middleware and IDL programing  
Tests with all Internet-browsers, versions and platforms.  
Bauspar-calculatingcore and surfaces  
Teamprograming (Sourceadmin).  
Databaseadmin, access to ISAM databases.  
Developing of objectoriented GUI user interfaces.  
Printing over DDE interface (Reportdesigner).  
Documentation.

Realized with:	Operationsystems	Windows NT 4.0
	Development tools	Java 1.1 and Visual C++ 5.0
	Databases	ISAM Database
	Tools, Libraries	ROI, Middleware, Customerown objectoriented Classlibrary, Internet

## **Developing a database-admin-program**

Role: Developer  
Branche: Softwarehouse

from 01/98 - 04/98 with 4 months

Spezification of the Softwarefeatures.  
Support and admintools for Access database.  
Developing of GUI user Interfaces.  
Database administration over ODBC and RDO.  
MS DAO interface with JetEngine.  
SQL query language.  
Documentation.

Realized with:	Operatingsystems	Windows NT 4.0
	Developmenttools	Visual Basic 5.0
	Databases	Access 7.0
	Tools, Libraries	MS-JetEngine, DAO, RDO, ODBC, InstallShield, MSDN

## **Installation of Network**

Role: Developer  
Branche: Advertising  
References: Co. MPS in Munich. Contact person Mr. Hunsinger.

from 11/97 - 12/97 with 2 months

Planning and installation of a Windows Network (5 PC's).  
Connection protocol NetBUI and Ethernet 10 MBit.  
Using a Networkhub.  
Installation of Internetaccounts.

Realized with: Operatingsystems	Windows 95, Windows NT Server 4.0.
Technique	RJ 45 twisted pair wires.

## **Programing of customer spezific softwaresolutions**

Branche: Lasertechnique

References: Co. Baasel in Starnberg. Contact person Mr. Wutz.

from	03/96 - 11/97	with	21 months
------	---------------	------	-----------

Spezifications of the Softwarefeatures.

Customervisits and discussions.

Developing of GUI Interfaces.

Reading of techniqual values from databases.

Serial communication.

SPS connection of mashines in processstreets.

Connecting of several production pc's with NT 4.0 Server.

Connection to Windows NT pc's to an UNIX-mainframe over FTP protocol.

Administration of Windows NT.

Documentations.

Installations.

Service travels.

Realized with: Operatingsystems	Windows NT 4.0, Windows 95, Windows 3.x
Developmenttools	Visual Basic 5.0, C, Visual C++
Databases	Access 7.0, FoxPro
Tools, Libraries	MS-JetEngine, DAO, RDO, ODBC, Custom Controls ActiveX from Crescent, OnNet FTP, InstallShield, MFC, MSDN

## **Developing of a Windows application to measure the pollution of Cars**

Role: Developer

Branche: Automobil

References: Co. Bosch in Plochingen. Contact person Mr. Roth.

from	07.94 - 12.94	with	6 months
------	---------------	------	----------

Working in a Softwareteam (5 people).

Using MS SourceSave.

Extensiv use of Windows API.

Design and development of GUI dialogs.

Serial communication to the measure devise.

Print of Data on the printer.

Protocolling into the database.

Test and support.

Realized with: Operatingsystems	Windows 3.11
Developmenttools	Borland C/C++

Databases	Access 2.0
Tools, Libraries	SourceSave, Installshield, Windows API

## **Developing an Satellite Network Management System**

Role: Developer

Branche: Telecommunication

References: Co. ANT Nachrichtentechnik in Backnang. Contact person Mr. Fröschle.

from 02.94 - 07.94 with 6 months
----------------------------------

Analysis of the problem in cooperation with the users.

Documentation of the features.

Design and development of GUI-Modules.

Using an objectoriented database

Developing a Client/Server application.

Implementation and documentation in english.

Realized with:	Operatingsystems	UNIX Solaris
	Developmenttools	vi Editor
	Databases	Spectrum
	Tools, Libraries	C++, OS Motif

## **Application to administrate files in a Novell-Network.**

Role: Developer

Branche: Cartographie

from 08.92 - 01.93 with 6 months
----------------------------------

Developing of menue user interfaces in "C".

Interface-convertierung in several formats (HPGL).

Developing a Network-Multiuser-Tools.

Realized with:	Operatingsystems	Windows 3.1
	Developmenttools	Microsoft C