# 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)

- Java, JavaScript, Typescript, Groovy, Groovy, Kotlin, Scala, Go, Python

- Angular, ReactJs, Wicket

- Spring Boot, Hibernate

- Kafka, NodeJs, npm

- Kubernetes, Docker

- REST API Webservices

- Coordination of Projects

**Availability:** From **16.12.2024** 100%

**Location:** Munich or Remote.

Conditions: 105,-€ 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: <u>info@hopf-it.de</u> Homepage: <u>www.hopf-it.de</u>

#### Past projects:

#### **Mission Control Panel - FELIS**

Branche: Public Sector, Police

Referenz: 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 - now with x months

- Senior Full Stack Developer
- 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 Coroutins
- 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 Authentification
- JWT/OAuth2 based Authorization
- CORS Cross Origin Resource Sharing
- CSRF Cross Site Request Forgery
- Zookeeper Cluster Manager
- Monorepo Usage with Nx
- Keycloack IAM Rolles and Rights
- Cloud Virtualization-Plattform VMware vSphere
- DevOps Gitlab Pipline
- 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, Powershell, maven, gradle, ant, Infinispan, Hazelcast, Vert.x4, Verticle, SLFi4, jackson, netty. logback, assertj, TCP/IP, Http, JUnit5, VisualVM, iMeter, 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, surefireplugin, Circuit Breaker, Node.js, SockJS, Prometheus, Micrometer, Grafana, ZooKeeper, Ansible, Terraform, GraphHopper, Gitlab, Node18, Java20, Kendo, Angular Material Design, Angular 16, Angular Nx, Jest, Karma, Reducer, Robot Framework, Taurus, Hibernate, DozerMapper, Sonar, SOAP, Liquibase, VMware vSphere, Keycloack, 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**

Branche: Bank

Referenz: Co. Atruvia/attempt in München

from 02/2022 - 03/2023 with 14 months

- Senior Full Stack Developer
- 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
- RedHat 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
- 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, Performanceanalysis, 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

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, webpackbundle-analyzer, WebP, Angular 15, Postman, newman, Swagger, Git, Bitbucket, Jenkins, OTC, RedHat 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,

# Shared projects for judiciary - GeFa

Branche: Public Sector

Referenz: Co. .msg in München/Ismaning

Contact person Mr. Shinja Strasser, Mr. Helmut Lämmermeier

arc42, Sketch MeaXure

http://www.msg.de

http://www.gefa-justiz.de

from	08/2021	- 02/2022	with	7 months
11 0111	00/2021	- 02/2022	VVILII	1 1110111113

- Technical Architect
- 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 ngxs/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

Tools

Eclipse, STS, IntelliJ, Visual Studio Code 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**

Branche: Finance

Referenz: 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

- Senior Fullstack Developer
- 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
- RedHat Openshift Cloud Environment
- Docker Container in Azure Cloud Environment

- Jenkins CI/CD-Pipelines
- 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
- 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
- Openshipt 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 Perfomance 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 tou BAP, KAPST and agree21
- Meetings with buisness 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

Communication in English and German

Realized with: Operatingsystems

Datenbases

Azure Cloud, Windows, Linux, Ubuntu KDE

H2, Oracle

Developmenttools

**Tools** 

Mapstruct, Hazlecast, Java 11, miro.com, HashiCorp Consul, Lighthouse, web.dev,

requestmap.webperf.tools, webpack-bundleanalyzer, WebP, Angular 11, Postman, newman,

Swagger, OpenAPI, Git, Bitbucket, Jenkins,

RedHat 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 Messaging, JPA, Hibernate, Log4j2, JWT, Maven, Gradle, Nexus, Sonar, Lint, Hystrix, H2, Oracle,

SQL, Flyway, NodeJs, 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, agua, Grafana,

Prometheus, funretro.io, IntelliJ, consul.io, gson,

kibana

# **Digital Marketplace - G2M**

Branche: Telecommunication

Referenz: Co. Rohde & Schwarz in München

Contact person Mr. Patrick Bauriedl, Mr. Ivan Kostov, Mr. Christoph

Maurer

http://www.rohde-schwarz.com

from 09/2019 - 12/2019 with 4 months	
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- Full Stack Developer
- 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
- RedHat 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 Lizence 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** 

RedHat 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, Openshift, 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**

Branche: Security

Referenz: 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
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- Full Stack Developer
- 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 Developmenttools Microsoft AD, AD CS, Visual Studio Code, Eclipse, **Tools** 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, replT, 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, ¡Soup, JIRA, conceptboard

#### Financeportal for public financing - PIF

Branch: Bank, Fintech

References Co. Dt. Pfandbriefbank/Capveriant in Munich/Unterschließheim

Contact person Mr. Benedikt Girz, Mr. Sergiy Barlabanov

http://www.pfandbriefba nk.com https://www.capveriant.com

from 11/2017 - 05/2018 with 7 months

- Full Stack Development
- 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 Tools

Azure, Node.js, bash, npm, Eclipse, IntelliJ 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

Branch: 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 Statemachine
- 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: Operating systems

Windows, Linux

Database

Oracle

Developmenttools

**Tools** 

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 Mindmaper,

realtimeboard, linoit, Scrum

#### Vehicle calculator for classic cars - ANDIE

Branch: 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 datenbase 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

**Tools** 

- Confluence Jira for communication
- Process model with Scrum Team
- Communication with Test Team

Realized with: Operating systems 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++,

subethasmtp

# **Telephone Number Porting with Java EE**

Branch: 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 abstraktion 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 Tools Eclipse, IntelliJ
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

**Branch: Automotive** 

References http://www.gi gatronik.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

Tools

SezPoz, Apache Commons, Jing, Jersey, Json, 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

Branch: Health Insurance

References <a href="http://www.kvb.de">http://www.kvb.de</a>

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
- 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: Operating systems Windows 7, Linux

Database Oracle 11g

Developmenttools Tools J2SE 7, STS - Spring Tool Suite, Kepler Eclipse 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 Eclpise Addon, CheckStyle, Maven, Tomcat, JUnit, XSLT, HttpUnit, DbUnit, Jenkins, joda-time.jar, jQuery, JavaScript Rhino Engine, JavaScript

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

Branch: Softwarehouse, Startup Company, Printmedia

References <a href="http://www.angeln.de">http://www.angeln.de</a>
References <a href="http://www.woont.com">http://www.woont.com</a>

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
- Implemention 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: Operating systems

Operatingsystems

Database Posto

Developmenttools Tools Windows 7, Linux, Ubuntu

PostgreSQL 9

J2SE 6, Eclipse 3.6.2 Helios, Glassfish Embedded, Glassfish 3.1.1, Embedded Jetty

EJB 3.1, JPA, CriteriaAPI, Apache Wicket 1.5, Eclipse, SVN, Subclipe, Subversive, Firebug Firefox Addon, Live HTTP headers Firefox Addon, PrefBar Firefox Addon, AnyEdit Eclpise

Addon, EclEmma Eclpise Addon, Maven, glassfish, Tomcat, Jetty, JUnit, Selenium, Jenkins, PMD, FindBugs, joda-time.jar,

guava.jar, Skype, SQuireL SQL, PostgreSQL DB, gforge, tickspot, MindMap Freeplane,

 $im 4 java, \ Image Magick, \ Graphics Magick, \ j Query,$ 

less, JCrop, OTRS, Facebook, Twitter, YouTube, Google Maps API, fancyBox

#### **JEE Tariff Calculator and Webservice**

Branch: 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 inheritage 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 programing 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: Operating systems Windows 7, Windows Vista, Windows XP, Linux,

AIX

Database HDB, DB2

Developmenttools

Tools

J2SE 6.0, Eclipse 3.x, Jetty6, Tomcat6, Live 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, WSDSL2Java, cygwin

# **Smartphone Web and App Development**

Branch: Entertainment

References <a href="http://www.androidzoom.com/android applications/trivial+dice/by matchi">http://www.androidzoom.com/android applications/trivial+dice/by matchi</a>

ng

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: Operating systems 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**

Branch: 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 runable 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
- ¡Unit 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: Operating systems 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,

SQLDevelper, SQLPlus, DbVisualizer, VNC, 7-

Zip, Tortoise, Subversion SVN, WinSCP,

PuTTY, Jira Bugtracking,

Clearspace, Thunderbird, Firefox, Ace

WINScreen, Windows XP, Linux Ubunto, 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)

Branch: 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 buisness and domain experts
- Use Case description with the CASE Tool MagicDraw
- MDA usage for the persistance 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 GidBagLayout
- 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 buisness 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 cupling- and dependency metrics

Realized with: Operatingsystems	Windows
Developmenttools	J2SE 5.0, Eclipse 3.3, Jbossrules, Drools Regel-
Tools	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

Branch: 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 configuratable 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 persistance 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	Eclipse 3.1, Enterprise Architect, XMLSpy
Tools	Enterprise Edition, JBoss, Tomcat 5.5, Struts,
	Ant, JUnit, Macromedia Flash and Dreamweaver,
	div. Eclipse Plugins, MySQL 5

## **Trainings and Consulting.**

Branch: All areas

References here are the biggest componies:

Co. SUN Micosystems 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 different 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 techinques.

- XML and XSLT.
- Xalan and Xerces parser event processing.
- Developing of course scripts.

• Englisch courses.

Realized with: Operatingsystems

Developmenttools
Tools

Tools

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.

Branch: Insurance

References Kassenärztliche Vereinigung Bayern (KVB) in Munich.

Contact person Mr Dietl.

from 02/2004 - 03/2004 with 2 months

- Refactoring and Reengeniering 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.

Branch: All areas

References here are the biggest componies:

Co. SUN Micosystems 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 presentationtools.
- · Developing of course scripts.
- Englisch courses.

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

## Internet application for an billingsystem.

Branch: Bank, Billingsystem

References: Co. 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, Reengeneeing of UML Modells, realised with Java and C++.
- Generic modelling with RUP. Generation of artifacts.
- JavaBeans and serverside Enterprise JavaBeans development.
- XML documents with Schema spezification.
- JSP pages and Java Servlets development.
- Java Script programing for all browsers.
- Webapplications and Webcomponents.
- JSP Engine configuration and support.
- C++ Framework development with STL.
- JNI API for destributet 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-prozedures.
- 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.

Branch: Bank, Stock

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

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 emmisionen.
- 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.**

Branch: 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 plattforms.
- 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, Middelware, Customerown objectoriented

Classlibrary, Internet

## Developing a database-admin-program.

Branch: 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: Operating systems 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.

Branch: 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: Operationsystems Windows 95, Windows NT Server 4.0.

Technique RJ 45 twisted pair wires.

## Programing of customer spezific software solutions.

Branch: 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 datbases.
- 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: Operating systems 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.

Branch: 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: Operating systems Windows 3.11

Developmenttools Borland C/C++

Databases Access 2.0

Tools, Libraries SourceSave, Installshield, Windows API

## Developing an Satellite Network Management System.

Branch: Telecommunication

References: Co. ANT Nachrichentechnik 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.

Branch: Cartographie

from 08.92 - 01.93 with 6 months

- Developing of menue user interfaces in "C".
- Interface-convertierung in sveral formats (HPGL).
- Developing a Network-Multiuser-Tools.

Realized with: Operating systems Windows 3.1

Developmenttools Microsoft C