# M.Sc. Viktor Stoitschev

Comp.Science

#### PERSONAL DATA

MOBILE: (+49) 0176-43603096
NATIONALITY: Bulgarian/German

EMAIL: kontakt@stoitschev.de LANGUAGES: German, English, Bulgarian

WEB: stoitschev.de

### **OBJECTIVE**

· Cloud architecture

• Backend (architecture)

DevOps

#### **SKILLS**

• Architecture: Microservices, Queues, Enterprise-Integration Patterns, DDD, Client-Server, Service-Oriented, Multitier, REST, Enterprise Service Bus

- Software Development Processes: Scrum, Kanban
- Collaboration: Atlassian (Jira, Confluence)
- **DevOps**: Kubernetes, Docker (Compose), OpenShift, Helm, CI/CD (Jenkins, Bamboo, GitLab, Azure DevOps)
- Backend: Java SE, Java EE, Groovy, Spring Boot, Spring Cloud, Node.js, .NET
- DBs and Migration: MySQL, MongoDB, Oracle, CosmosDB, Liquibase, Flyway
- Stream-Processing: Apache Kafka
- Integration: Apache Camel
- Scripting: Bash, Python, Groovy, Ansible, PowerShell
- Monitoring and Alerting: Prometheus, Grafana, CheckMK
- Tools: Git, Maven, Gradle
- Repository Manager: Nexus, Artifactory
- IDE: Intellij (IDEA, Rider), Eclipse, Visual Studio, VS Code
- Testing: JUnit, Spock, Mocha
- Quality Assurance(QA): Selenium

#### **WORK EXPERIENCE**

12/2024

DevOps Consultant - Stress Test Manager for Financial Systems

Client: European Commodity Clearing AG, Remote

04/2023

Project: Stress Test Manager for Financial Systems

Participation in all major infrastructure topics related to an application designed for stress test simulations ensuring financial system resilience and performance under extreme market conditions

- Led the creation and implementation of test, acceptance, and production environments on OpenShift.
- Managed and created Jenkins CI/CD pipelines for the provisioning of the python-based "StressTest" application to the OpenShift environment.
- Created Dockerfiles, administered docker images including vulnarability scans and upgrades. Maintained Docker Registry (nexus)
- Maintainied Gitlab SSH-Keys
- Consulted team members on Kubernetes and OpenShift.
- Created Helm Charts
- Administered HashiCorp secrets and automated injection to MySQL configuration via Ansible
- Provisioned MySQL server instances for each of the above environments
- Created a parameterized reexecutable MySQL Enterprise Server configuration using Ansible playbooks for all aspects of mysql - for initial installation, backup and replication, LDAP access, access rights to database schemas and tables, etc. applicable to multiple environments
- Enabled authentication to MySQL Server via LDAP, managed LDAP accounts and groups, using proxy users and ldap\_plugin
- Administered access rights to database schemas and tables. Configured SSL communication between node\_exporter and mysqld.
- Conducted performance and recocery tests
- Created disaster recovery plan for database and cluster recovery adhering to BaFin regulations
- Conducted performance tests on "Stress Test Manager" per design document.
- Developed advanced **Grafana** monitoring dashboards for tracking key indicatiors for **kubernetes** pods, database query statistics, replication and backup status.
- Enabled Prometheus scrapes and advanced MySQL metrics via MySQLD Exporter.
- Managed communication between the application developers, SRE team other and external support partners.
- Created advanced OpenShift Cronjob historical monitoring with alerts.
- Adhered to company standards and processes.
- Provided comprehensive technical documentation.
- Created detailed Jira X-Ray tests and executions.

**Technologies:** Openshift; Kubernetes; Helm; Jenkins; Ansible; Docker, Nexus, Gitlab; HashiCorp Vault; MySQL 8.0.32 Replication, MySQL Router 8.0.32, MySQL Workbench, MySQL Enterprise Monitoring Agent, ldap\_plugin; Python 3.9, 3.10, 3.11; Grafana 8, 9 & 10; Prometheus; NodeExporter; MySQLD Exporter; CheckMK; Confluence; Jira X-ray; Bash

IT Consultant: Consulting, DevOps, and Development for the IAM team

Client: Security Authority, Berlin and Wiesbaden

06/2022

Project: P2020

Connection of applications to the IAM system and optimization of the development process

- Development of an Oracle OIM Connector with Oracle ICF for connecting a CA/RA system to OIM
- Development of a framework for the implementation of OIM connectors
- Complete design of a Java EE application; delivery of servers and application via Gitlab pipeline in multiple Kubernetes environments
- Automated database migration via Gitlab pipeline, Docker, and SQL\*Plus
- Identifying manual tasks; optimization through automation
- · Disclosure of services via REST interfaces and delivery via pipeline in Cloudfoundry
- Optimization of the development process by introducing Maven; script-based migration of all dependencies to Artifactory

**Technologies:** Java EE, Kubernetes (Ingress, Deployments, PVC, Certificates, Certificate Issuer, etc.), Docker, Oracle Identity Connector Framework, JDeveloper, Oracle DB 12.1.0.3, Gitlab, Cloudfoundry, Payara (Glassfish), Bash, Maven, Ant, Artifactory, npm, node

06/2022

IT Consultant: Architecture, DevOps, and Development

Client: msg Systems, Remote

01/2022

Project: AUDI CONNECT

#### Development of backend services for the Audi Connect platform

- Database and architecture design
- Requirements management for development tasks
- Technical conception
- Java software development in the backend
- Coordination of development tasks across multiple teams
- End-to-end error analysis
- Analysis and optimization of CI and CD
- Analysis and optimization of development processes through automation based on Docker and Bash scripts
- Oracle/PostgreSQL schema initialization and database migration using Docker and Bash scripts
- Training of team members in the use of Docker, Oracle, and PostgreSQL

**Technologies:** Java EE, Spring Boot, Kubernetes, Docker, PostgreSQL, Oracle, log4j2, Java Persistence API (JPA), OpenAPI, Async API, SSL with mutual authentication, MQTT, AWS Cloud, Jenkins, Liquibase

IT Consultant: Microservices with Spring Boot

msgGillardon, Remote

6/2021

Project: Online calculation service for financial products

Architecture design of a distributed microservice application for the exact, audit-proof calculation logic of interest-bearing asset and liability transactions

- Breakdown of the legacy monolith into individual modules separated by interfaces
- Development of an adapter layer for the connection to the existing computing core (MARZIPAN) via REST, SOAP, GraphQL.
- Asynchronous processing of calculation requests via Kafka Topics;
- Performance logging and analysis using Graphana and Prometheus
- Implementation of unit and integration tests with JUnit and Wiremock;
- Generation and delivery of Docker images in dev, test and production environments (AWS) using CI/CD pipelines in Gitlab
- AWS configuration management
- Implementation of identity and access management via OpenID Connect (Keycloak)
- · Documentation;
- Briefing of developers

**Technologies:** Spring Boot, Java 11, Docker, AWS, Gitlab, Jackson, REST, Java Native Interface (JNI), Asciidoc, OpenAPI, Swagger, Graphana, Prometheus, Zipkin, Keycloak

6/2021

IT Consultant: Microservices with Spring Boot

Fiducia GAD/ msgGillardon, Remote

1/2021

Projekt: STATISTICAL REPORTS TO THE BUNDESBANK

Architecture design/database design of a distributed microservice application for the collection and validation of statistical reports

- Automated XBRL and JsonSchema validation of a variety of forms for reporting the risk-bearing capacity and foreign trade of various banking institutions to the Bundesbank.
- Development of modules for document-oriented storage and batch processing of forms, creation of XML and XBRL protocols, import of CSV files;
- Implementation of unit and integration tests with JUnit and Wiremock;
- Integration in test and production environments;
- Documentation;
- Briefing of junior developers

**Technologien:** Spring Boot, Java 11, Kubernetes/OpenShift, Jenkins, Lombok, Oracle, Vue.js, PatternFly, JGiven, Wiremock, Jackson, REST, JDBC

Freelance IT Consultant: Microservices with Spring Boot

Association of Statutory Health Insurance Physicians Brandenburg Potsdam, Germany

Potsdam

09/2020

Project: Physicians Billing Portal

Modernisation of the online portal for the quarterly billing procedure at ASHIP Brandenburg

- Transfer of legacy code to Java 14 and Spring Boot
- Creation of Docker images and continuous delivery to Kubernetes development and test environments via Jenkins deployment pipelines and a Nexus repository;
- Setup and configuration of a Kubernetes cluster using Rancher:
- Unit, BlackBox, Integration and API tests; deliberate error case tests;
- Creation of Kubernetes Deployments and Services, Ingress, etc.;
- Detailed technical documentation

**Technologien:** Java 14, Kubernetes, Docker, Jib, Jenkins, Rancher (Kubernetes), Spring Boot, Apache Kafka, Vaadin, JasperReports, MySQL, Redmine, Nexus, Gradle

09/2020

Freelance IT Consultant: IoT with Azure Devops

DHL IT Services, Berlin, Germany

03/2020

Project: IoT Common Platform

Architecture, Implementation, Configuration of an IoT Landscape based on Microservices

- Refactoring of CI/CD pipelines;
- Design and Implementation of End-to-End tests for different data paths;
- Implementation using Node.js; Transfer of legacy code (Node.js) to a new .NET/Docker/AKS stack;
- Participation in the design of the microservice architecture and the release process;
- Creation of Docker Images and their delivery to Kubernetes Dev, test and production environments using Azure DevOps and ARM templates;
- Setup and configuration of a Kubernetes Cluster;
- Creation of Kubernetes Deployments and Services, SecretProviderClass, AAD Podl-dentity and resource configurations.

**Technologies:** Kubernetes, Docker (Compose), CI/CD (Azure DevOps), Azure (Stream Analytics, Log Analytics, Blob Storage, Storage Queues, Event Hub, Cosmos DB, Redis Cache, AKS, Key Vault, etc.), Git, Bash, Powershell, .NET, C#, Node.js, npm, Mocha, Atlassian (Jira, Confluence), Visual Studio, VS Code

Freelance Clould and Microservice Architect, DevOp, Backend Lead, Mentor **Publicis Pixelpark**, Berlin, Bielefeld, Cologne, Germany

11/2019

Project: MICROSCOPE (WWW.SWD-AG.DE)

Architecture, Implementation, Deployment and Configuration of a Microservice-based Website including the:

- Breakdown of the lecacy monolith code to the new microservice architecture based on an implementation with Spring Boot & Cloud, Java, etc.;
- · Creation of Docker images;
- Continuous delivery to Kubernetes development, test and production environments via Jenkins deployment pipelines and a Nexus repository;
- Configuration of a private Kubernetes cluster;
- Design, setup and coordination of the development and release processes (Scrum+);
- Preparation of training materials concerning the development and deployment of Java Spring Boot based Microservices (including Jenkins/Kubernetes); training the stuff about microservice architecture and Spring Cloud;
- Design of update mechanisms for dependencies to external libraries/software modules;
- Design of the routing strategy among the microservices and to a logging server;
- Detailed technical documentation;

**Technologies:** Kubernetes, Docker (Compose), Azure, CI/CD (Jenkins), GitLab, Nexus, Java SE, Java EE(JPA), Groovy, Spring (Boot, Cloud), Bash, Maven, Mongo DB, GraphQL, jHipster, JUnit, Spock, Atlassian (Jira, Wiki), Apache Camel, Selenium, IntelliJ, RabbitMQ

Software Engineer

Westernacher Solutions AG, Berlin, Germany

07/2017

Project: Notary processes software

**Database migration: design, development, tests, supervision**. Developed a database migration infrastructure with an interchangeable layer for the purpose of migrating 200+ notary office legacy (live) databases, based on Enterprise Integration Patterns

- Implementation of an XML deserialization layer based on XSLT and XStream
- Implementation of a content based routing engine for multi pass reference resolving and data persistence with Apache Camel, Java EE(JPA), Spring Boot, Groovy
- Optimization through parallel processing, caching, JVM optimization, streaming
- Verification of migrated data through contract-based testing based on Spock (unit and integration tests)
- Implementation of backend services for the target software product

**Technologies:** Java SE, Java EE(JPA), Spring Boot, Groovy, Apache Camel, Spock, Gradle, Bash, XSLT, XML, Mongo DB, Bamboo, IntelliJ, Git, Docker, Vargrant, CentOS

07/2017

Software Engineer

Westernacher Solutions AG, Berlin, Germany

08/2016

Project: SIGNATURE CARD ORDER SYSTEM FOR THE FEDERAL CHAMBER OF NOTARIES Implementation and integration of backend services of a shopping platform for the certification body of the federal chamber of notaries.

- Implementing payment services (Java, Spring)
- · Verifying correct money operations through unit and integration tests
- Implementation and integration of REST services
- Business process modeling and integration of executable business processes based on Camunda Java API

**Technologies:** Java, Spring Boot, Maven, JUnit, Mockito, Hamcrest, Bash, SQL, Oracle 10g, Jenkins, Intellij, Git, Docker, Vargrant, Camunda

07/2016

Software Engineer

Westernacher Solutions AG, Berlin, Germany

07/2015

Project: MASTER DATA INDEX FOR THE FEDERAL CHAMBER OF NOTARIES

- Implementation of new backend services and extending the current software base
- Implementation of new frontend services
- Optimizations of SQL queries via Oracle Explain Plan
- Optimizing search performance

**Technologies:** Java, Spring Boot, Gradle, Bash, XML, SQL, Oracle 10g, Bamboo, IntelliJ, Git, Docker, Vargrant

0//201/

06/2015 | Software Engineer

e.solutions GmbH, Erlangen, Germany

O5/2014 Development of multi-threaded in-vehicle infotainment applications (Audi, Porsche, Bentley)

- Development, tests, maintenance of HMI applications for car-specific functions seat settings/heating, air conditioning, battery management of hybrid vehicles, etc.
- · Analysis of technical specifications
- Use of command line tools (operating system: QNX)
- Simulation of Functional Control Units with CANoe 8.2
- Customer presentations of the software on a prototype vehicle
- On-site workshops with customers
- Compliance with deadlines and product cycles for country-specific software delivery

**Technologies:** Java (Concurrency API), OSGi, Jenkins, JUnit, Mockito, Ant, CANoe, QNX, Bash, Teamforge, Perforce

04/2014 | Software Engineer for Driver Assistance Systems

Fraunhofer-Institut für Offene Kommunikationssysteme, Berlin, Germany

O4/2013 Development of traffic simulations for the purpose of optimising and extending the functionality of an ADAS (Advanced Driver Assistance System); Design of scenarios , development, documentation.

Technologies: Java, MATLAB, Python, JavaScript/HTML5, Bash

3/2013 | Software Engineer

Daimler Center for Automotive IT Innovations (DCAITI), Berlin, Germany

9/2011 | Project: WebCOMAND - In-Vehicle Infotainment Platform

Architectural design of an open in-vehicle infotainment platform with a focus on portability, extensibility, security and availability; HMI and back-end infrastructure design and development; Documentation, tests and maintenance.

**Technologies:** Java SE (Concurrency, JNI, Java Media Framework, JMX), Java EE (JSP, Servlets), OSGi, IP Multimedia Subsystem (IMS), MATLAB, Python, JavaScript/jQuery/AJAX/HTML5/CSS3/WebSockets, RPC/RMI, Multithreading, Ant, SVN, EhCache, Google APIs, Chrome Extensions

08/2011 | Software Developer

Tembit Software GmbH, Berlin, Germany

11/2009 | Project: E-BANKING PORTAL FOR SPARKASSE

Extension and maintenance of the e-banking software *tembanking*; Contribution to the implementation of an electronic banking web portal for a major bank; Development, documentation, tests und maintenance.

**Technologies:** Java EE, Spring, Struts, iBatis, jQuery, Zkoss, Oracle, AspectJ, TestNG, etc.

07/2009 | Database Analyst

Nokia Siemens Networks, Berlin, Germany

Comparison of different high availability, scalability and cluster solutions based on the database management systems MySQL and PostgreSQL in the context of the NSN Online Charging Server. The primary goal was to increase the throughput for incoming requests directed to the OCS.

- Research open source HA solutions
- Install and configure highly ranked HA solutions in the NSN infrastructure (Fedora Unix Server)
- Apply SQL load tests w/o optimization
- Optimize SQL queries and select optimal solution after optimization

Technologies: MySQL, PostgreSQL, Java, Unix, Bash, SQLLoadGenerator

00,20..

02/2009

## **EDUCATION**

Master of Computer Science 04/2010 - 04/2014

Technical University Berlin, Germany

Thesis: "An Open Platform for In-Vehicle Infotainment Applications"

Bachelor of Science in Software Engineering 10/2006 - 03/2010

Hasso-Plattner-Institut, University of Potsdam, Germany

Thesis: "Relational Database Systems at the Nokia Siemens Networks @vantage Platform: A Comparison of MySQL Cluster and PostgreSQL"