

# Vadim Tsvetkov

**AWS Senior Architect and DevOps**



## Contact

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## Age

47

## Languages

Fluent English, fluent German, native Russian.

## Personal

My interests are music, literature, travel, snowboarding.

## Objective

I'm looking for a senior position in software development.

Preferred tasks and environment:

- Cloud architecture and DevOps: AWS best practices, Kubernetes, Docker, Micro-Services
- Infrastructure as Code: Terraform, CloudFormation, CDK
- CI/CD: Jenkins, Github actions, CircleCI, Argo CD, builds and releases
- Workflow: Scrum, Kanban, collaboration with dev teams.

Working environment options:

- Remote home office - international
- Occasional business trips.

# Experience Summary

- Cloud engineer with 7 years of experience
- Software developer with over 20 years of experience
- Web developer with over 20 years of experience
- Strong experience in client-server application development and object-oriented programming
- Excellent knowledge of different programming and markup languages and related API's
- Excellent knowledge of web development platforms and technologies
- Strong skills in system analysis and system approach
- Strong research skills
- Excellent organizational, communicative and inter-personal skills

## Education

### Master's degree in Computer Science, July 1999

State Technical University of St. Petersburg

## Certifications

AWS Solutions Architect Associate, December 2020

## Work Experience

### AWS DevOps Engineer, July 2023 - January 2024

[E.ON Energie Deutschland GmbH](#), Cologne/Munich/Essen, DE via [Wipro](#), Munich, DE.

Well-known energy provider migrates some of its public and backoffice services into AWS. Requirements for the new platform include security compliance, maintenance and observability improvements and cost optimizations of the cloud infrastructure. My work on the project comprised of relevant infrastructure solutions in these areas.

- AWS cloud infrastructure, IaC automation (Terraform, Hashicorp Nomad cluster, Harbor, Consul, Aurora MySQL DB)
- Security compliance (IAM keys, Image scan, DB and S3 permissions, SSM tunnel, Azure VPN)
- System observability (Splunk, Grafana, Cloudwatch, Canaries, Lambda, MS Teams alerts, 3rd-party monitoring tools)
- CI/CD and GitOps (Gitlab, pipelines, Jenkins, Docker, AMI)

## **AWS Architect and DevOps, September 2022 - April 2023**

[mobilezone GmbH](#), Berlin/Cologne/Bochum, DE via [The NextGen GmbH](#), DE.

The client develops and operates several online shops selling mobile phones and plans. These shops are being migrated to AWS with as many services replaced by the AWS managed services as possible. My tasks included architecture and greenfield implementation of the target AWS infrastructure.

- AWS cloud infrastructure, IaC (Terraform, CDK, Helm, VPC, A/NLB, Kubernetes EKS, Aurora Postgres SQL, RabbitMQ, ElastiCache Redis)
- System observability (Prometheus, Grafana, Cloudwatch)
- ETL data processing (AWS S3, OpenSearch, Python)
- CI/CD and GitOps (Argo CD, Gitlab, Docker, AWS ECR, MS Teams)

## **AWS Architect and DevOps, May 2021 - August 2022**

[nDimensional](#), Boston MA, US via [Toptal](#), US.

The big data platform developed by the client is one of the leading solutions on the market of so called digital twins. These AI-powered models of real devices - from streaming routers to steam turbines - bring value to B2B clients by providing real-time monitoring and ease of development of their systems. My work in the project included devops and development tasks within the client's wide software landscape.

- AWS cloud infrastructure, IaC (Terraform, CloudFormation, Helm, VPC, EC2 On-Demand/Spot, Kubernetes EKS, Kafka MSK)
- Automated CI/CD (Jenkins, Docker, AWS ECR, Slack)
- Maintenance of Big Data DBs (Cassandra, Scylla, DynamoDB, MySQL, AWS Glue, Python)
- Micro-services and API development and integration (Java, Spring, Scala, REST)
- Maintenance and monitoring of ML and streaming jobs (Apache Spark, Flink, H2O)
- Remote work with the US and EU teams.

## **AWS Architect and DevOps, July 2020 - April 2021**

[Sparta Science](#), Menlo Park CA, US via [Toptal](#), US.

The client develops force plate hardware and the coupled AI and machine learning software to deliver body scans that diagnose movement health. End users are athletes, fitness clients and patients from military, sports, medical or occupational areas in different countries. I am responsible for design and maintenance of the AWS cloud architecture on multiple AWS accounts containing installations of the client's software.

- AWS cloud infrastructure, IaC (Terraform, CloudFormation, VPC, ECS, Fargate, EKS, Route 53, VPN, Backup)
- Automated CI/CD (CircleCI, Github actions, Docker, Lambda, Image Builder, AWS ECR)

- App refactoring for cloud (NodeJS, Hasura, GraphQL, micro-services, Lambda, Python, AWS Aurora, Postgres SQL, Nginx)
- Machine Learning (SageMaker, model training, inference, versioning, API Gateway, Lambda, AWS Glue, Python)
- Monitoring and auditing (CloudWatch, CloudTrail, Elasticsearch, Kibana, WAF, Kinesis)
- Security compliance for mil/gov clouds (FIPS, FedRAMP, DoD CC SRG IL4 GovCloud, TLS, pen/vuln. scans, Nessus, Burp, Wazuh)
- VPN access to cloud via LDAP and Active Directory (Directory Services, Transit Gateway, LDAPS)
- Remote work with the US and EU teams.

## **AWS senior DevOps architect, April 2019 – January 2020**

[Ergo Versicherung AG](#), [DKV Krankenversicherung AG](#), Düsseldorf, Germany via [Austin Fraser GmbH](#), Germany.

The client develops new insurance products and introduces online applications that capacitate them. These software tools are created using the latest technologies as parts of a micro-services landscape, and from the beginning are cloud-ready. Tasks such as building, deploying and connecting these applications belong to the "infrastructure as code" (IaC) developed by me.

- Infrastructure as code (Jenkins, GitHub, Docker, Kubernetes)
- Clear separation of concerns between developers and infrastructure using separate IaC repos
- CI/CD pipelines, builds and releases (Jenkins, Groovy, Azure DevOps, Github, tagging/branching, web hooks, image promotion, Nexus, Docker, NPM, Node.js, Express.js, React.js)
- AWS cloud infrastructure (CloudFormation, Route 53, DynamoDB, SES, SQS)
- AWS security (Certificate Manager, S3 bucket encryption, load balancers, TLS)
- OpenShift cloud infrastructure (OpenShift, Kubernetes, ImageStream)
- Monitoring (Kibana, ELK, Kubernetes logs)
- Bridging between developers and project management
- Remote work with different corporate teams.

## **AWS cloud migration architect and DevOps, April 2018 – January 2019**

[AXA Versicherung AG](#), Cologne, Germany via [Hays AG](#), Germany.

The client is porting their insurance software and infrastructure to be used in the Amazon Cloud. The chosen migration strategy mainly involves changes and enhancements in the infrastructure since the software itself is not (yet) cloud-ready.

I worked in the following areas:

- Infrastructure as code, implementation and refactoring of common use cases (Groovy 2.5, OpenShift 3.9, Docker, Kubernetes, Jenkins 2, GitHub, Git, Maven 3.5)
- Jenkins Pipelines development (Groovy, scripted, declarative, shared libs, custom DSL)

- AWS RDS (Microsoft SQL Server 2012-2014, PostgreSQL, SQL Skript, provisioning with Terraform Templates, Jenkins Pipelines)
- Guidewire InsuranceSuite (Claim Center, Policy Center, Document Composer, Java, Gosu)
- Unit, integration, warmup and load tests (Selenium 3.10, Gosu, Jenkins plugin)
- Security (database encryption, secrets management)
- Resilience (session stickiness, data replication and backup, Chaos Monkey)
- Remote work with different corporate environments and teams.

## **AWS cloud migration architect and Java software developer, July 2017 – March 2018**

[Allianz SE](#), Munich, Germany via [TCS Tata Consultancy Services GmbH](#), Munich, Germany.

The client, world's largest insurance company, is transforming its software landscape to leverage cloud technologies and workflows. My work in the project included:

- Update of the existing software to use modern technologies (Java 8, Spring Boot, Maven, WebSphere Liberty Profile 17, AJAX, JavaScript)
- Cloudification, containerization and orchestration of applications (Jenkins Lifetime & Pipeline, Amazon AWS, Red Hat OpenShift 3, Docker, Kubernetes Services, environment-specific configuration, Pivotal Cloud Foundry)
- Security aspects, also in the cloud infrastructure (Two-way TLS 1.2, Egress Policies, Access Tokens, Secure Cookies, passwords/certificates/keystores in container, etc.)
- Fail safety (Apache Ignite, session persistence)
- Monitoring and diagnosability (health checks, Dynatrace, ELK: ElasticSearch-Logstash-Kibana)
- Cooperation and coordination, also remote, with different business, DevOps and backend Teams in a corporate environment.

## **Java web frontend architect (Wicket), October 2016 – June 2017**

[eFonds Solutions AG](#), Munich, Germany via [Computer Futures](#), Munich, Germany.

The client is the leading specialist on the market of real asset funds. The company develops digital solutions that help banks, businesses and issuers at managing their real asset investments. The daughter company eFonds24 GmbH offers the biggest online marketplace with product and market information, where 700.000 shares in 7.500 funds with 21 billion Euro capital are managed. The project that I have joined involves development of new frontend applications that will allow these services to be offered to private investors as end customers. Such development implicates restructuring and refactoring of the existing system. To transform the new application landscape to a logical and consistent environment there is a need for a new stylistic and functional UI concept. My work on the project:

- Full-stack: Concept and realization of the new Java web applications, including new enterprise homepage and end customers portal (Java 7..8, Apache Wicket 7.5, Spring Boot 1.5, J2EE 6 CDI + Weld 2.4, Servlet 3, Elastic Search 5.2, Gson 2.8, Ehcache 3.2, Tomcat 7, Apache Server

- 2.4, Maven 3).
- Frontend: creation of the new UI and UX concept for the existing applications; as part of it, development of a reusable library of frontend components (Apache Wicket 7.5, AJAX, HTML, CSS3, JavaScript, jQuery, Ext JS, Bootstrap 3, responsive design).
- Frontend and backend tests, test driven development (JUnit 4, Mockito).
- Support and consulting in the IT team.
- Close cooperation with in-house graphical designers, key account managers and marketing.

## Senior Java developer, January 2015 – October 2016

[Allianz Global Assistance](#), Munich, Germany via [M-Invent Solutions GmbH](#), Munich, Germany.

The customer is a large European insurance company with a broad web application landscape. In the course of this engagement I provide maintenance and new development for 8 of these applications in parallel. Most of these applications deal with insurance data by creating and managing it. From the business point of view they differ by the user base: a) applications used internally by the Allianz employees to manage existing insurance policies; b) applications/services used externally by Allianz partners as part of the reselling process and c) applications used externally by the end customers to sign up for the new insurance contracts.

Work on this project includes:

- Development of Java web applications, full-stack (Java 7..8, Hibernate 3..4, Spring 3, JAXB 2, IBM DB2 iSeries AS/400, Tomcat 7, Apache HTTP Server 2.2..2.4, Maven 3).
- Refactoring of legacy code.
- Web frontend (JSF 2, MyFaces 2.2, Apache Tomahawk, HTML, CSS, jQuery).
- Performance optimization of the external real-time services and XML interfaces (SOAP, Apache CXF 3, Apache Axis2).
- PDF generation for insurance documents and reporting (Jasper Reports 4.7, iReport Designer).
- Testing backend & frontend, test driven development (JUnit 4, Mockito).
- Support on different levels for the internal departments of Allianz: sales, accounting, etc.
- Supervision and communication with partner companies regarding connectivity to SOAP services.
- Requirements/Change Requests management with the largest partners.

## Senior Java developer (Wicket), July 2013 – September 2014

[Telefónica O2 Germany GmbH & Co. OHG](#), Munich, Germany via [Cognizant SetCon GmbH](#), Munich, Germany. Product owner: Sascha Kallin (O2).

This project involves development of the web interface for the O2 service resellers. The application is used by resellers in all shops to create and manage contracts and subscriptions for private and corporate customers of the O2 network. The implementation is based on the Java EJB3, Wicket and Spring platforms.

My responsibilities:

- Development of the application, full-stack (Java 7, EJB, JPA, JAXB, REST, Wicket 1.6, Shiro, iText, Jboss 7.2, Maven 3).

- Web GUI (HTML, AJAX, CSS 2...3, JavaScript, JQuery 1.10, JQuery Mobile 1.4, cross-browser compatibility Mozilla, Webkit, Internet Explorer 8+, Android & iOS touch devices).
- Development of a custom load test framework (JSoup).
- Testing backend & frontend, test driven development (JUnit, Mockito, Selenium).
- Scrum development process with agile methodology (Jira, Confluence, Jenkins).

## **Technical lead, Senior Java developer (Wicket), November 2012 – April 2013**

[BMG Rights Management GmbH](#), Berlin, Germany via [Valtech GmbH](#), Munich, Germany. Product owner: Gaurav Mittal (BMG).

The client is a company dealing with copyrights and royalties for musical content. This development project consists of several web applications meant to eventually replace existing old system. MyBMG portal is used by musicians and agents to manage royalties and payment statements for song copyrights. MSOL application is used by end users to buy licenses for various musical content. MSO application is used by client's internal employees to distribute and sell content to partners and interested parties. The implementation is based on Spring, Hibernate and Wicket platforms.

My responsibilities:

- Development of the application, both frontend and backend (Java 6, Wicket 1.5...1.6, Spring, Hibernate, Tomcat 7, MS SQL Server, Maven, Gradle).
- Web GUI integration, collaboration with designers (HTML, AJAX, CSS3, SASS, JavaScript, JQuery, cross-browser compatibility, touch devices).
- Development of the Android client for the MSOL application (Android 4+, Google AppEngine, REST).
- Test driven development (JUnit, Mockito).
- Wicket coaching in the team, also remote members from India (Skype, Google Hangout).
- Agile development process, Scrum master (Jira, Confluence, Jenkins).

## **Senior Java developer (Wicket), October 2010 – August 2012**

[Telefónica O2 Germany GmbH & Co. OHG](#), Munich, Germany via [Cognizant SetCon GmbH](#), Munich, Germany. Product owner: Sascha Kallin (O2).

This project involves development of the web interface for the O2 service resellers. The application is used by resellers in all shops to create and manage contracts and subscriptions for private and corporate customers of the O2 network. The implementation is based on the EJB3 and Wicket platforms.

My responsibilities:

- Development of the application, both frontend and backend parts (Java 6, Wicket 1.4...1.5, REST, Shiro, Dozer, iText, Jboss 5...7, Maven).
- Web GUI (HTML, AJAX, CSS 2...3, JavaScript, JQuery 1.4...1.7, JQuery Mobile 1.1.x, cross-browser compatibility Mozilla, Webkit, Internet Explorer 6...9, touch devices).
- Porting of the frontend from HTML to Android 3.1+ for handheld devices, REST for backend



communication.

- Testing, backend & frontend, test driven development (JUnit, Mockito, Selenium).
- Scrum development process (Jira, Confluence, Hudson, Jenkins).
- Agile methodology.

## **Senior Java developer (Wicket), July 2010 – September 2010**

[Wirecard AG](#), Munich, Germany. Project manager: Martin Rusnak.

The goal of this internal company project is creation of rich Java components – building bricks used in development of company's publicly available online software products. My tasks include the following:

- Architecture and implementation of the frontend component library (Java, Wicket, Tomcat, Maven, JUnit).
- Being part of the Scrum process (Jira, CruiseControl).
- Consulting the team on Apache Wicket development.
- Responsibility for client-side representation of the product (HTML/CSS, Javascript, jQuery, AJAX, cross-browser compatibility Firefox, Internet Explorer).

## **Hybris software engineer, May 2009 – March 2010**

[Bitaro GmbH](#), Munich, Germany. Project manager: Oliver Waitz.

Development of the innovative ASP solution for telecommunication service resellers. The product serves as a convenient interface between providers and resellers and features web-based GUI, user-defined workflow, multi-client access, phone number management, etc.

I was working on the following items:

- Architecture and development of the frontend layer (Java, JSF, HTML/CSS, Javascript, AJAX) basing on the backend infrastructure (Spring, Hibernate, Oracle, Apache Tomcat).
- Connecting frontend with Hybris PIM and Commerce functionality (Java, Hybris, XML).

## **IT consultant (Wicket), January 2009 – April 2009**

[BT Germany GmbH & Co.oHG](#), Munich, Germany. Project manager: Robert Ban.

Frontend development for the internal sales tool of the company. The tool consists of several web applications. It has been planned to completely rewrite their web frontend to unify the look and feel, make them more user-friendly, responsive and feature-rich.

My services in the project included:

- Architecture of the new frontend layer
- Frontend development (Java, Apache Wicket, HTML/CSS, Javascript and JQuery, AJAX) with the usage of standard backend stack (Spring, Hibernate, BEA WebLogic)
- Consulting BT employees on the different frontend technologies like Wicket, Javascript, AJAX, etc.



## **IT consultant (Hybris), May 2008 – October 2008**

[Walbusch GmbH](#), Solingen, Germany via [Denkwerk AG](#), Cologne, Germany. Project managers: Benjamin Gerken (Walbusch), Stefan Uthoff (Denkwerk).

Technical consulting at Denkwerk outsourced by Walbusch to create two more Hybris stores as an extension of the already existing one (see the next paragraph) for their daughter companies ( [Mey&Edlich](#), [Avena](#)). My services in the project included:

- Consulting the Denkwerk developers on the different aspects of the Hybris platform
- System architecture of the new store extensions
- Backend development needed to extend the existing store functionality to convert it into a multi-store environment (Java, MySQL, Hybris, XML).

## **Hybris software engineer, July 2007 – March 2008**

[commercetools GmbH](#), Munich, Germany. Project manager: Denis Werner.

I was invited to participate in the creation of an online store for the German apparel for seniors called Walbusch. The project has been based on the online commerce framework licensed from [Hybris AG](#). My work in the project included:

- From-scratch implementation of the import-export module that handles the store catalog data (Java, Hybris, XSLT, XML, Castor, JDOM)
- Business layer architecture involving extension of the Hybris API classes (Java, Hybris)
- Backend development: order processing, user management, etc. (Java, Tomcat, MySQL)
- Frontend development with close cooperation with designers (JSF, MyFaces)
- Content creation and maintenance using the built-in Hybris CMS module (XML, HTML, CSS)
- Designing the project build process (Ant)

## **Senior software engineer, March 2006 – June 2008**

CScout Trendberatung GmbH, Munich, Germany. G-ROC Web Applications, Augsburg, Germany. Project Manager: Philippe Souidi (CScout).

Script-based web applications for the content providers specializing in the trend research. The projects include: trendpool.com, cscout.com, rapidobject.com, packexperts.de, beschaffungswelt.de, brechenmacher.de, bfe-muenchen.de, bankruptcy.co.uk.

My contribution in these projects was:

- System architecture
- Database design (MySQL)
- Server-side development (Apache, PHP, CakePHP, Ruby on Rails, MySQL)
- Development using third-party CMS platforms (Wordpress, Typo3, Vanilla)
- Client-side development (cross-browser XHTML for IE, Firefox, Safari, CSS, AJAX & JQuery)

## **Software engineer, March 2004 – February 2006**

[Diagnoseklinik München](#), Munich, Germany.

Development of the full-circle document management application for a radiological clinic: from doctors submitting reports to the system to patients having online access to it. My work for this project included:

- System architecture
- Switching the project workflow into the test-driven development
- Server-side development (Tomcat, Jetty, Apache, Java, Spring, Hibernate, Ruby on Rails, Oracle)
- Client-side development (HTML for IE, Firefox, Safari, Velocity, CSS, JavaScript, AJAX)
- Integration with proprietary medical software and standards (DICOM, PACS, HL7)
- Working in close contact with medical doctors and patients to improve their user experience.

## **Software engineer, March – April 2006**

Not really a job, more like a personal project: online appointment planner.

Development of an internal administration tool using Ruby on Rails, RESTful approach and an AJAXified interface – first for internal use at the aforementioned clinic and then transforming it into a public online service. The tool allowed users to easily create and doctors to manage appointments from a web browser. The public release has never been achieved due to some formal difficulties.

## **Software engineer, December 2001 – February 2004**

Xpherix GmbH, Munich, Germany.

Provider of the personal assistant software that gives users mobile or online access and a possibility to exchange their personal information such as contacts, calendars and notes. My work in this company included:

- System architecture
- Server side development on several application servers (J2EE, Tomcat, WebSphere, Oracle, XML)
- Client side development for many different mobile devices (J2ME, HTTP, WAP)
- Web front-end development (Java Servlets, JSP, HTML, XML, XSL/XSLT)
- Integration with enterprise directory services (MS Exchange, LDAP servers, JNDI)
- Working on application environment in close contact with mobile operators (Vodafone, O2, Verizon, AllTell, US Cingular)
- Global collaboration (simultaneous development, debugging, code sharing together with people in the States and Britain).

## **Software engineer (frontend), February 2001 – November 2001**

Gloocorp AG, Munich, Germany.

A start-up company developing online conferencing software with application data synchronization (via Internet) and voice transfer (via PSTN). My work included:

- Developing front-end for online conferencing software, communicating to backend via XML
- Java applets and servlets
- Integration with Lotus Notes and Lotus Sametime (using HTTP)
- Concept design and thorough functional description of integration with MS Outlook (custom forms), with and without use of MS Exchange
- Connecting to Oracle database
- Connecting all of the above mentioned to Microsoft .NET platform

## **Team leader / Intranet web developer, February 2000 – February 2001**

Artificial Life Rus, Ltd. "Smart Bots for e-Business", St. Petersburg, Russia.

Intranet team in the company developing satellite applications (bots) for corporate web sites and software applications based on high interactivity and user-friendliness. My duties were:

- Concept development based on opinions of project teams and discussions with IT management
- System design, functional and structural requirements for the intranet server
- Management within the intranet team: workflow, task distribution, deadlines, deployments, etc.
- Feedback and technical support for intranet services
- Server-side development (C#, ASP.NET, MS SQL Server)
- Client-side development (DHTML, XML, XSL/XSLT, CSS, VBScript, JavaScript, ASP)
- Integration with MS Exchange Server

## **Web designer / developer, May 1998 – February 2000**

Microbit, major notebook seller, St. Petersburg, Russia.

- Development and support of the two company's web servers
- Front-end design including cross-browser HTML/DHTML code and graphics for the web servers
- Technical writing and translation: documentation on notebooks and other computer products.

## **HTML / JavaScript coder (part-time), May 1999 – December 1999**

WEGA, web design and hosting company, St. Petersburg, Russia.

- Simultaneous development and support of different web sites (HTML, CSS, Javascript)
- Work in close connection with a graphic designer and computer artist

# DBMS programmer, September 1994 – February 1995

Teplomash, joint-stock company, St. Petersburg, Russia.

- Design and development of the data management system for internal company use.

## Industries

- Energy supply
- Telecommunication
- Insurance, Healthcare
- Financial services
- Finanzdienstleistung
- Software development
- Hardware development
- E-Commerce, Trading
- Media licensing
- Market research

## IT Skills

### Cloud

- AWS
- OpenShift.

### OS

- Unix/Linux
- Windows
- Mac OS.

## Programming environment

- IaC: AWS CloudFormation, Terraform template, Kubernetes descriptor, CircleCI config, Jenkins pipeline
- Skript: Bash, Python, Groovy, Ruby, Ruby on Rails, Perl, VBScript
- JavaScript: Node.JS, React.JS, TypeScript, JSON, jQuery, jQuery Mobile, Prototype, DWR, Scriptaculous
- Java: J2EE, EJB, JAXB, JPA, Java Servlets, Apache Wicket, JSP, JSF, Velocity
- HTML, XHTML, CSS for browsers on desktop, mobile and touch devices
- XML, XSL/XSLT

- PHP, CakePHP.

## **DB**

- MySQL, PostgreSQL, Oracle, IBM DB2, MS SQL Server, AWS Aurora, AWS MariaDB
- Scylla, Cassandra
- DynamoDB, ElastiCache, MongoDB.

## **Application servers**

- Nginx, Apache
- Tomcat, Jboss, BEA Weblogic, IBM WebSphere
- MS IIS, MS Exchange
- Lotus Notes.

## **Development tools**

- IDE: VS Code, IntelliJ IDEA, Eclipse, Borland Jbuilder, Sun NetBeans
- Repository: Git, Github, Gitlab, SVN, CVS, PVCS
- Build: npm, Maven, Jenkins, Gradle, Ant, Luntbuild.