

Michael Schmidt

Senior Software Engineer

Work Experience

2013-Present **Senior Software Engineer**, *SAP SE*, Berlin.

Team lead, architect and lead developer for internal projects based on Kubernetes. Lead a team that builds and operates a Kubernetes based foundation for SAP's inhouse cloud. Responsible for product management, development and operations of a managed Kubernetes platform. Managed multiple projects based on Scrum/Kanban.

- Championed container technologies. Introduced Kubernetes as basis for SAP's inhouse Cloud. Transistioned a large dev-ops team to cloud-native technologies.
- o Built a managed service for provisioning of Kubernetes clusters
- Managed large fleets (300+) of Kubernetes clusters
- Coached and nurtured a Helm based distribution of OpenStack

2006–2013 Expert Consultant, SAP AG, Berlin.

Architected, implemented and lead internal projects based on Ruby, Rails, Chef, Sinatra, Java, GWT, Alfresco. Coordinated team assignments, interviewed and hired new team members.

- Championed the devops idea and introduced Opscode Chef as configuration management software into the organisation.
- Coached and nurtured a continuous delivery workflow, with automated testing and deployment, as well as test-driven development.
- o Introduction of Ruby and Ruby on Rails. Transitioned the team from Java to Ruby.

2003–2006 Consultant, SAP SI AG, Dresden.

Consultant for custom development on SAP Enterprise Portal.

- On-site customization for various customers.
- Coaching and training for SAP WebDynpo, SAP Enterprise Portal, SAP Knowledge Management, SAP NWDI.

2003 Freelancer, SAP Deutschland AG, Berlin.

Worked on a internet platform for a large utilities provider. Implemented a modern frontend in Java, JSP, HTML and CSS.

2002–2003 Working Student, eSAP, Berlin.

Master thesis about Modelling Attack-Vectors in modern Web-Applications. Validated approach by applying findings for the SAP Enterprise Portal.

1999–2002 **Research Assistant**, Distributed Artificial Intelligence Laboratory, Berlin.

Worked for Professor Sahin Albayrak on a service-oriented distributed agent platform. Wrote a complex graphical user interface in Java for managing onthologies used in inter-agent communication.

1992–2003 Freelancer, crashedpixels.de, Crailsheim.

Created a full featured inventory management application for a local goldsmith business. Used Delphi and SQL to write custom reports, bills and labels. Supported and migrated the application from Windows 3.11 to Windows XP.

1992–2003 **Webmaster**, crashedpixels.de, Crailsheim.

Build and maintained various dynamic websites for local businesses.

Customer specific modifications in Perl using the MovableType CMS. Various dynamic implementations using PHP on a LAMP stack.

1992-1996 Customer Service, HEM Expert, Satteldorf.

Configured and assembled large numbers of PCs and servers as specified by OEM customers. Worked in customer support on troubleshooting and fixing end-user hardware and software problems.

Projects

2017-Present Kubernikus - Kubernetes as a Service, SAP.

Lead architect and developer for a Kubernetes as a Service platform, nativly integrated for OpenStack. Managed the productive operations of the system as a managed service. Used Technologies: Kubernetes, OpenStack, Golang, client-go, CoreOS, Docker

2013-Present Converged Cloud - OpenStack Privat Cloud, SAP.

Team lead, architect and developer for an private OpenStack cloud. Responsible for designing, provisioning and operating a fleet of bare-metal Kubernetes clusters. Setup world-wide distribution in 16+ productive regions. Used Technologies: Kubernetes, CoreOS, Docker, BGP, Golang, Prometheus

2012-2013 Inhouse Cloud Platform, SAP.

Architect and developer for a inhouse cloud and automation platform. Continuous delivery with an automated deployment pipeline based on Bamboo. Ruby on Rails, Vagrant, Chef, Red Hat Enterprise Linux

2012–2013 Expert-Finding Social Network, SAP.

Lead architect and developer for a social network for finding experts. Integration with various inhouse and external profile management applications. Continuous delivery with an automated deployment pipeline based on Bamboo. Used technologies: Ruby on Rails, Solr, Chef, Red Hat Enterprise Linux

2011–2012 Employee Motivation Campaign, SAP.

Test-Driven development of an application for uploading and customization of images and videos. Integration with internal community platforms. Ruby on Rails, Resque, Imagemagick, Picky, Chef, Red Hat Enterprise Linux.

2010–2011 Ecosystem App-Store, SAP.

Architected, implemented and deployed an app-store for promoting and selling SAP solutions created by partners. Frontend in Sinatra and JRuby running in OSGI and SAP Lean Java Server. Custom content management system in Sinatra and Markdown. Object-Document Mapper in Java for MongoDB and GWT. Multifaceted Search Frontend based on GWT.

2009–2010 Document Management System, SAP.

Worked on a company wide introduction of Alfresco as document management system. Implemented various custom workflows for internal customers. Adapted an existing content-management solution to the Alfresco backend. Built various tools and applications based on Alfresco, Java and GWT.

2006–2009 Business Center for SAP ByDesign, SAP.

Built a internet platform that facilitates the launch and ongoing support for SAP ByDesign. Architected and implemented a custom content management system on SAP Enterprise Portal. Redesigned a rendering engine that is suitable for large traffic scenarios. Coached and trained support and content-editors.

2005–2006 Incident Management System, Deutsche Post.

Architected and implemented a customer facing incident management system for Deutsche Post AG. Custom solution based on SAP Enterprise Portal, WebDynpro for Java and customization in ABAP. Setup build and deployment infastructure based on SAP NWDI. Coached and trained customer's internal IT staff.

2004–2005 Management Self-Services for Automotive, Volkswagen.

Implemented Management-Self Services for an Intranet Platform. Rapid-Development of web interfaces in WebDynpro that integrate with a heavily customized SAP ERP system. Sales support for SAP Enterprise Portal.

2003–2004 **Productization of Business Packages**, SAP Consulting.

Created a content management solutions for SAP Enterprise Portal (Web Editing) and webpages (Web Publishing). It provides customers with an easy way to create content in KM an automatically translate into iViews and layouts, a feature which was not available in the standard product at the time. Worked on productizing these extensions for SAP Enterprise Portal. Created documentation in LATEX and Docbook that can be converted to HTML, PDF and SAP Knowledge Warehouse. Developed a web service for converting Microsoft Word documents into HTML.

2003 Internet Platform for Utilities Provider, Gasag.

Relaunch of the Gasag website (https://www.gasag.de/).

Custom build CMS based on java and iViews in SAP Knowledge Managemenent and Enterprise Portal. Created a content-management workflow based on Microsoft Word.

Education

1999–2003 **Diplom Informatiker, Computer Science**, *Technische Universität*, Berlin.

Diplom in Computer Science with minor in work psychology. Coursework included computer graphics, artificial intelligence, computer security and statistical evaluation, psychology and interpretation of surveys and questionaires.

1996–1999 Undergraduate Degree, Computer Science, Insitute of Technology, Karlsruhe.

Minored in advanced mathematics. Coursework included in-depth mathematics, complexity theory, practical work with different types of programming languages.

1988–1996 Abitur, Albert-Schweitzer Gymnasium, Crailsheim.

Languages

German Native

English Fluent

French Conversant

Computer skills

Extremely Proficient With

 $Languages \quad Golang, \ Ruby, \ Javascript, \ Coffeescript, \ Java, \ Perl, \ PHP, \ Delphi, \ Pascal, \ HTML5,$

CSS3, HAML, SASS, JSON

Frameworks Kubernetes, client-go, Rails, Sinatra, Rack, Chef, Spring, GWT, OSGi, jQuery,

Bootstrap, SAP Enterprise Portal

Databases Etcd, MySQL, PostgreSQL, SQLite, MongoDB, Redis

Editors VSCode, Vim, Eclipse

Tools Git, Docker, Concourse, TravisCI, nginx, Passenger, SAP Netweaver, SAP Lean

Java Server, Adobe Photoshop, LATEX, Shell

OS MacOS, CoreOS, Windows, Ubuntu, Debian, Red Hat Enterprise Linux

Have Experience With

Languages Objective C, C, C++, Prolog, Lua, Erlang, Groovy

Databases CouchDb, Berkley DB

Tools Apache Webserver, Berkley DB, Wordpress CMS, Movable Type CMS, Flash

OS Suse, Fedora Linux, Raspbian

Interests

Sports Crossfit, Beach-Volleyball, Biking

Games Boardgames, eSports

Controllers Ardunio, RaspberryPi