# Curriculum Vitae



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## **Key Facts**

Date of Birth:	November 7th, 1979
Place of Birth:	Kirchdorf/Krems, Austria
Parents:	Johann Prüller and Ursula Prüller (maiden name Lukas)
Nationality:	Austria
Degrees:	Ing. PhD BSc

### Education

- 1986 1990: Elementary School, 4053 Kremsdorf
- 1990 1994: Grammar School, Bundesrealgymnasium 4050 Traun
- 1994 1999: Vocational College for Information Technology and Organization, **HTBLA fuer EDV und Organisation**, 4060 Leonding
- 2002 2004: BSc (Hons) Studies in Computer Science, University of Derby (UK); graduated with First Class Honours degree
- 2005 2014: Doctoral Studies in Distributed Machine Learning, DeMontfort University, Leicester (UK); thesis title: "Distributed Online Machine Learning for Mobile Care Systems"; supervisors Dr. Eric Goodyer, Dr. Mario Gongora, Dr. Robert John and Dr. Ulrich Bodenhofer;

#### **Employment Record**

Past Projects / Positions

- 1997 1999: Landis & Gyr LFT, 4020 Linz, Austria; First professional experience as freelancer besides education. Tasks: design and development of a process data archive application; Tools: Oracle Database, MS Excel, Visual Basic (for Applications)
- 1999 2000: Sozialhilfeverband Linz-Land, 4050 Traun, Austria; (civilian service) *Development of Individual Software*, *PC-Support*. *Tasks*: conception and implementation of a database application in the field of centralized purchasing for the 8 nursing homes of the association; general PC-User support;

Tools: Visual Basic, MS Access, MS Excel

• 2000 - 2001: moveIT Software, 4600 Wels, Austria; *Member of the e-Business Team*, exploration of new technologies, providing training courses for colleagues.

*Tasks*: design and implementation of a complementary web-application to the standard product of the company. Acquiring core competency on XML and XSLT and training of colleagues in this field.

Tools: Progress Database and 4GL, XML, XSLT, Lotus Notes

• 2001 - 2003: IGS Systemmanagement, 4531 Piberbach, Austria; *e-Business development*, AS/400 in the backend, mainly Java and Open Source tools.

Tasks: general projects in the field of e-Business (web) and PC-applications. Development of an e-Business module for the AS/400 based main software of the company (ERP software), web-technologies, usability engineering, customer support

Tools:Java, AS/400, DB2 Database, Tomcat, Apache HTTP Server, XML/XSLT, Lotus Notes

• May 2006 - August 2006: Telekom Austria AG; Individual Software Development Project.

*Tasks*: Design and implementation of an intranet-application for management and analysis of the customers remote machinery;

*Tools*: Java5, Apache Tomcat, Oracle Database, Spring Framework, XHTML, CSS, Java Server Faces (JSF)/Facelets, iBatis SQL Maps, XDoclet

• September 2006 - March 2007: LINZ AG: Personalized Web-Portal Reengineering and Redevelopment Project

Tasks: Redesign and implementation of existing web-based applications into a new, personalized web-portal with single-signon user accounts (sso). *Tools:* Java5, Apache Tomcat, Oracle Database, HTML, CSS, JSP, Struts, Tiles, iBatis SQL Maps, JOSSO (SSO Library)

#### • April 2007 - August 2007 LINZ AG: New Web Technologies Evaluation and Consulting, Knowledge Transfer

*Tasks:* Knowledge acquisition on and evaluation of new state-of-the-art Java technologies for enterprise web-application development; building of proof-of-concept prototypes; providing consulting on web application development and state-of-the-art software development standards, tools and methodologies.

*Tools:* Java5 (Java SE, Java EE), Apache Tomcat, Oracle, HTML, CSS, Java Server Faces (JSF), Java Persistence API (JPA) [Oracle TopLink Essentials, Apache OpenJPA], Facelets for JSF, Apache MyFaces and Tomahawk, JSR-168 Portals (Pluto), NetBeans IDE, Eclipse WTP, Apache JMeter

 2009 - 2010 < Austrian Public Utility Company>: Portlet Development for B2C Web-Portal and E-Business

*Tasks:* (Technically) design and implement several JSR-268 based Java-Portlets as a member of a larger team. Apply styles as defined within CSS from an external agency. Identify and fix security issues. Portlets are deployed within JBoss Portal 2.7.

*Tools:* Java6 (Java SE, Java EE), JBoss Portal 2.7, Oracle, HTML, CSS, Java Server Faces (JSF), JBoss RichFaces, JBoss Portlet Bridge, Java Persistence API (JPA) [Hibernate JPA], Facelets for JSF, Eclipse WTP, JBoss Tools Eclipse Plugin, SVN, JOSSO SSO Framework

• 2007-2010: <Austrian Public Utility Company>: E-Business (B2B) Web-Application

*Tasks:* Design and Implementation of a business critical web application which is used to electronically communicate and document the customers business processes. Evaluation and fixing of web-app security issues as this web-application is classified as mission critical.

*Tools:* Java6 (Java SE, Java EE 5), Apache Tomcat, Oracle, HTML, CSS, Java Server Faces 1.2 (JSF), Java Persistence API (JPA) [Hibernate JPA], Facelets for JSF, JBoss RichFaces, Eclipse WTP, Jasper Reports, iReport, SVN

• 2011-2014: <Austrian Public Utility Company>: E-Business (B2B) Web-Application

*Tasks:* Design and Implementation of further modules for an existing b2b web application, integrate a larger set of additional business processes into the existing platform, deeper integration with backend systems required; optimisation of usability; design and implement a fine grained role based authorization system.

Tools: Java7 (Java SE, Java EE 6), Apache Tomcat 7, Oracle Database, HTML5, CSS, Java Server Faces 2.x (JSF), Java Persistence API 2.0 (JPA) [Hibernate JPA], Facelets for JSF, JBoss RichFaces 4, Eclipse IDE, Jasper Reports, iReport, SVN • 2015-2016: <Austrian Public Utility Company>: Large Scale Employee Information Portal

Tasks: Requirements engineering, system architecture design and contributing to the implementation of an online information portal for the customers employees; many formal processes between employees and company are carried out over this web portal and replace former paper-based processes; the web-based frontend is communicating online with missionciritcal backend systems, security and stability of the system are mission critical; employees (i.e. the main users of the system) are not experts on computers, therefore optimisation of usability was an important requirement.

Tools: Java7 (Java SE, Java EE 6), Apache HTTP Server, Apache Tomcat 8, Oracle Database, HTML5, CSS, Java Server Faces 2.x (JSF), Java Persistence API 2.0 (JPA) [Hibernate JPA], Facelets for JSF, JBoss Rich-Faces 4, Eclipse IDE, Flot Charts, RESTful services based integration with .NET based backend systems web-services; SELinux; SVN

**Current Projects:** 

#### **Commerical Projects:**

• Since 2003: IMS (Integrated Mobile Solution): LBS logics Mobile Business Solutions, 4020 Linz, Austria; Realization of an idea as start-up company. CTO / Leading of the development team, high personal responsibility.

Tasks: Implementation of a vision - from an idea to a fully working software product for mobile business process management; foundation of the start-up company in 2003; mainly product development and acquisition of reference customers until 2006; meanwhile the product has been successfully placed on the Austrian market, several installations at well-known customers exist; the software product is further developed and permanently enhanced; find more information on www.lbs-logics.com

*Tools*: JDK8, Java (Java EE 7), MySQL 5, JOnAS Application Server, WildFly Application Server, Jasper Reports+iReports, Hibernate, JPA2.0 - EclipseLink, WebWork (Struts), Java Server Faces 2.x, JBoss RichFaces 4, PrimeFaces 5, XML/XSLT, NGINX HTTP Server; Jenkins; Apache Velocity, Quartz Scheduler, Amorph, Apache Axis2, Eclipse IDE, CVS/GIT; Apache Cordova, Android and Java ME (in older versions) based mobile clients;

• Since 2009: several well-known companies: *Technical consulting in large-scale enterprise projects* 

*Tasks:* Participation in large-scale enterprise software development projects. Requirements engineering and business process analysis, technical consulting and professional support of customers development team members, consulting of customers in (agile) project management methods, evaluation and selection of best-fitting tools and technologies, consulting in system design and software architecture, software quality management, technical leadership for development teams

*Tools:* not limited to specific tools or technologies but mainly residing in the context of distributed computing and the Java ecosystem, highly scalable Java EE based server systems with integrated (mainly Android and/or Apache Cordova based) mobile clients backed by large scale databases

Involvement in Open Source Projects:

- Amorph: Fast and Easy to Use Java Data Transformation Library; Project Founder; http://amorph.sourceforge.net
- FileRA: Java 2 Enterprise Edition File System Resource Adapter (JCA Compliant); Project Co-Founder and Member; http://sourceforge.net/projects/filera
- JOnAS: Certified Java EE 6 Enterprise Edition Application Server; Contributed to translation of German documentation; http://jonas.ow2.org
- HoloJ: *Proxying Framework for Abstraction of Remote Action Invocation Implementations*; Project Founder; http://sourceforge.net/projects/holoj

#### **Research** Areas

The main area of research within my doctoral studies:

• artificial intelligence and distributed online machine learning in the context of mobile computing (e.g. smart patient monitoring in mobile care)

Involved technical fields:

- Artificial Intelligence (e.g. Artificial Neural Networks, Online Machine Learning and Evolving Systems, etc.)
- Distributed Computing, Mobile Computing
- Energy Aware Computing
- Smart (Patient) Monitoring Systems

#### Memberships

- Association for Computing Machinery, ACM
- Austrian Society for Artifical Intelligence, ÖGAI
- Austrian Association for Innovative Computer Science, InnoC

### **Computer Skills**

- Operating Systems: Expert on Ubuntu systems (Desktop and Server); Mac OS X; Windows 3.1/95/98/ME/2000/XP/Vista/7/8; other Linux distributions (e.g. Debian, SuSE, CentOS and RedHat), basic knowledge OS/400 IBM e-Series; MS-DOS;
- Mobile Platforms: core focus on Apache Cordova and Android based mobile development but also: Symbian OS, Palm OS, Windows CE/Mobile;
- Databases/Persistence: Expert in SQL; MS Access; Oracle; IBM DB/2; MySQL; MS SQL Server; JDBC, Hibernate, Java Persistence API (JPA, JPA 2.0) [EJB3 EntityBeans] with Oracle TopLink / EclipseLink JPA and Hibernate JPA, Apache iBatis "hybrid" O/R mapping framework;
- Programming Languages: Expert in Java (Java EE 7, Java SE 8, Java ME; Android); Groovy; JavaScript; Turbo Pascal; Assembler; Visual Basic; Visual Basic for Applications; PL/SQL; C/C++; basic knowledge of PHP; basic knowledge of C#; basic knowledge of UNIX shell scriping;
- Technologies: Java Application Development (platform independent) mobile, desktop, server; Windows Application Development; Web-Application Development; Development of Android Apps; Development of Apache Cordova based mobile Apps; XML; XPath and XSLT; Web-Technologies: http, HTML/XHTML/HTML5, CSS, AJAX, JSP, Java Server Faces (JSF2.0) + Facelets, JavaScript, ...
- Tools: Antenna; Apache ANT; Apache Axis2; Apache HTTP Server; Apache Tomcat; Apache POI; Apache Cordova; Atlassian Confluence; Atlassian JIRA; CrE-ME Java for Windows Mobile; Android SDK; Cygwin; CVS; Eclipse IDE; FreeMind; GIT; Java Wireless Toolkit; Java Service Wrapper for Windows NT/XP; Jasper Reports + iReports; JBoss; JOnAS Appserver; GlassFish (basics); Apache Geronimo (basics); JT400/JTOpen; JUnit; jQuery; Jenkins; Maven 2 (basics); MySQL Database; MySQL Workbench; MS SQL Server (basics); MS Visual Studio; MyEclipse IDE; Netbeans IDE; Open Workbench Project Management; Oracle Database (basics); Poseidon for UML; Proguard (Java Obfuscator); Postnuke CMS; Mambo/Joomla CMS; WordPress CMS; Quartz Scheduler; Selenium IDE; Spring Framework; Struts; Struts Tiles; TOAD for Oracle; Unison File

Synchronizer; Apache Velocity; VSS; VirtualBox; WebWork; XCode; XDoclet; XML Spy; XWork; WildFly Application Server; ...

- Software Packages: MS Office; OpenOffice/LibreOffice; L<sub>Y</sub>X(Latex); Lotus Notes; IGS MT; Fabasoft Components;
- Software Design and Architecture: Expert in design of scalable multitier distributed architectures; high personal interest in software quality management and software maintainability in general; personal interest in agile project management methods (e.g. Scrum, Kanban, ...)
- Current Main Focus: large scale Java Enterprise based Server-Applications and Web-Applications (Java EE); Mobile Computing (Android, Cordova); Open Source Tools; Software Design, Architecture and Maintainability; Agile Methods; Artificial Intelligence and Online Machine Learning;

### Language Skills

- German (mother tongue)
- English (fluent)

#### Further Skills, Certificates

- NLP Basics Workshop, (M. Rosenmayr, 2002)
- detailed studies of (Web-)Usability Engineering inspired by Jakob Nielsen (2002)
- Brainbench Java 1 Certified; scored higher than 95% of all previous test takers
   (Brainbench, Inc.; June 2006);
   (public transcript available at http://www.brainbench.com/transcript.jsp?pid=2031313)
- Microsoft Certified Professional, MCP (1999)
- ÖKV / ÖRV A-Trainer Unterordnung

## Special Interest in Computing

- Lightweight and Agile Software Development (e.g. extreme programming methods) and
- Agile Project Management Methods (e.g. scrum, kanban)
- Maintainability in computing, Enterprise Systems and Software Architecture

- Mobile computing, telemetry and telematics (Android, Cordova)
- Enterprise computing (mainly Java EE based)
- Artificial Intelligence (AI) and Machine Learning (ML)

# Personal Interest, Hobbies

- my family
- my dogs, dog sports, dog training
- horse-riding
- enjoying the mountains, hiking
- reading
- food awareness
- tech & computing