Peter Wensing

Systems analyst

Development · Instruction · Consulting

Parkstraße 4 38179 Groß Schwülper Germany

Phone: +49 (0)5303/6082 Mobile: +49 (0)173/9493169 e-mail: office@pwensing.de

Curriculum Vitae

Personal Data:

Born June 19, 1963 in Hamm/Westphalia, unmarried

Education:

Study of mathematics and computer science (Technical University of Braunschweig, Germany)

Professional Career:

Nov. 2016 - today

Freelance consultant and software developer at 'BG-Phoenics GmbH', Hannover [developer of software for accident prevention and insurance association]

- Extensive refactoring of the department specific notification system to enable it to be used by all departments
- Migration of all business processes of department 'Leistungswesen' to a newly developed review system
- Development of new features as well as numerous refactorings and bugfixes for the department 'Leistungswesen'
- Keywords:
 - o Java 11
 - o JBoss EAP 7.3
 - o EJB 3.1
 - o IBM DB/2 10.5
 - o PostgreSQL 12.6
 - o Git 2.28.0
 - o Bitbucket 7.6.0
 - o Eclipse 2020-12
 - o SonarQube 8.9.1
 - o JUnit 4.13.0
 - o Microsoft Windows 10 Professional
 - Redhat Enterprise Linux Server 6.9

Dec. 2015 - today

Continuation of my private projects concerning home automation and media center

- Extension of the system to my entire living space with multiple cooperating computer systems
- Introduction of a intelligibly structured and sustainable software architecture
 - o Introduction of reactive expressions for the rule engine
 - Introduction of object transactions
- Introduction of object oriented logging of the rule expressions and an Eclipse GEF application to display them
- Keywords:
 - o Android 11
 - o Java 11
 - o Docker 19.03.15
 - o MQTT
 - o Jackson 2.12.5
 - o PostgreSQL 12.7
 - o Eclipse GEF 5.2.3
 - o Eclipse 2021-12
 - o Android Studio 2020.3.1 Patch 2
 - ∘ C/C++
 - o gcc 9.3.0
 - o Git 2.25.1
 - o Ubuntu Linux 21.04
 - o Debian 10.10
 - o BeagleBone Black (ARM Cortex-A8-based microcontroller platform)
 - Hardware interfaces: Ethernet, RS485, 1-Wire (OneWire), SPI, I2C, GPIO, gpio-keys
 - Board layout using KiCad 5.1.10

Apr. 2015 - Dec. 2015

Freelance consultant and software developer for a car rental agency, Hannover

- Development of a new web based system for master data acquisition by administrators and for online booking of vehicles by customers
- Intensive consulting regarding the system's architecture
- Setting up the infrastructure for the implementation of the system
- Implementation of the system's backend in a team of two to three developers
- Various reviews and bugfixes
- Keywords:
 - o Scrum
 - Windows 8.1 Professional
 - CentOS 6.6 (Final)
 - o Java 1.8.0
 - o JBoss EAP 6.4.0, JBoss AS 5.5.0 Final
 - o Java EE 6, EJB 3.1
 - Hibernate 4.2.18.Final, JPA 2.0
 - o SoapUI 5.0.0 und 5.1.3
 - o JUnit 4.11.0
 - o JMockit 1.17
 - Arquillian 1.1.3
 - o Checkstyle 6.8.1
 - o Apache CXF 2.7.14, JAX-WS 2.2
 - o JAXB 2.2.5
 - o PostgreSQL 9.3.6-2
 - o Eclipse 4.5.1
 - o Git 2.6.4
 - o Gradle 2.4

June 2014 - Apr. 2015

Freelance consultant and software developer at 'HIS Hochschul-Informations-System eG', Hannover [developer of software for university administration]

- Development of new and maintainance of existing features in the area of application and admission
- · Various refactorings and bugfixes in all system layers
- Performance optimizations
- Keywords:
 - o Scrum
 - o Ubuntu Linux 14.04
 - Java 1.7
 - o Tomcat 7.0
 - Hibernate 3.6.10
 - o Spring, Spring Webflow, Spring Transaction, Spring Web 3.1.0
 - Java Server Faces (JSF)
 - o JUnit 4.11
 - o PostgreSQL 9.0
 - o Eclipse 4.4

Time out for accomplishing several private projects concerning media center and home automation

- Development of a smartphone remote control for my media center including a 64 channel ambilight system
- Integration of Digital Room Correction based on the convolution engine BruteFir into the Linux audio system ALSA for optimizing the sound of my audio/video system
- Development of hard- and software for controlling electrically driven jalousies and radiator valves dependent on time, window state, solar intensity and temperature
- Development of hard- and software to automatically control lights, radiators, circulation pump, ventilation and music using various sensors and actors in my freshly renovated bathroom
- Development of a smartphone app to control the various home automation components
- Keywords:
 - o Android 4.3
 - o Java 1.7.0
 - o JAX-WS
 - o QI4J
 - o Eclipse 4.3.0
 - ∘ C/C++
 - o gcc 4.6.3 and 4.7.2
 - o Ubuntu Linux 13.04
 - BeagleBone Black (ARM Cortex-A8-based microcontroller platform)
 - Arduino Ethernet (Atmel AVR based microcontroller platform)
 - Hardware interfaces: RS485, 1-Wire (OneWire), SPI, GPIO, gpiokeys
 - UDP and TCP over Ethernet
 - Board layout using Fritzing 0.8.3b

Nov. 2010 - July 2012

Freelance consultant and software developer at 'BG-Phoenics GmbH', Hannover [developer of software for accident prevention and insurance association]

- Development of a framework module for dependency injection
- Development of an application module for merging partner duplicates
- Development of a client/server based tool for the administration of JMS messages in various application queues
- Keywords:
 - o Java 1.6.0
 - o IBM Websphere 6.1
 - o JBoss 6.0.0.Final
 - Eclipse RCP/JFace 3.5.2
 - Spring Web-Services 2.0.2
 - o JMS 1.1
 - IBM Websphere MQ 7.0.1.5
 - o EJB 3.0
 - o JAXB 2.1.11
 - o IBM DB/2 9.5
 - o MID Innovator 2009
 - o JUnit 3.8.1
 - o Microsoft Windows XP Professional
 - o AIX 7.1

Aug. 2007 - Apr. 2010

Freelance consultant and software developer at 'ivv GmbH', Hannover [developer of software for insurance companies]

- Consulting regarding the architecture of a company-wide java-based framework for insurance applications
- Furnishing a survey for evaluation of two application frameworks existing in the company
- Design and implementation of various architectural components to be used in different insurance applications
- Development of new and maintainance of existing premium calculators for the web in all classes of insurance
- Various refactorings
- Keywords:
 - Web application with approx. 50 claims per hour
 - o Java 1.6.0
 - o Tomcat 6.0.18
 - o BEA WLS 10.3
 - MID Innovator 9.1.02
 - Eclipse 3.5.0
 - o Velocity 1.5
 - o iText 1.3
 - o Microsoft Windows XP Professional
 - o SunOS 5.10

Mar. 2005 - Aug. 2007

Freelance consultant and software developer at 'Volkswagen AG', Wolfsburg [car manufacturer]

- Extension and service for the server part of the across-the-group system for processing warranty and goodwill claims in a team of approx. 50
- Consulting regarding various architectural decisions
- Refactorings and reimplementations of various system components
- Optimization of performance-critical parts of the system
- Consulting and prearrangements for a major refactoring of the core framework of the system
- Development of various eclipse plugins for special purposes
- Keywords:
 - Web application with more than 5000 users and over 10000 hits/h
 - o Java 1.4.2 up to 6.0
 - o Oracle 9i and 10g
 - o Oracle IAS 10g / OC4J
 - o Tomcat 5.0.28
 - Eclipse up to 3.2.2
 - o IBM Rational Rose 2003
 - o JUnit 3.8.1
 - o JProbe Suite 6.0
 - o Findbugs 1.2.0
 - o Microsoft Windows XP Professional
 - o Sun Solaris 9.0

June 2004 - Mar. 2005

Freelance consultant and software architect at 'gedas deutschland GmbH', Wolfsburg [software development company]

- Extension of the user interface for the production controls of several factories of the Volkswagen AG [car manufacturer]
- Development of a reusable, high-performance persistence and transaction framework in consideration of the peculiarities of the existing database schema
- Development of a business object model for the GUI-relevant components of the production controls
- Development and optimization of complex, performance-critical SQL statements within the business object model
- Development of a view/controller framework for implementing the GUI dialogs
- Development of several GUI dialogs for the production controls based on the view/controller framework and the business object model
- Keywords:
 - Cincom Smalltalk ObjectStudio 5.2
 - o IBM DB2 UDB 7.1
 - Telelogic CM Synergy 6.3
 - o IBM Rational ClearQuest 2002
 - o Microsoft Windows XP Professional

May 2003 - June 2004

Freelance instructor of various seminars and consulting

Subjects:

- J2EE architecture and programming
- BEA WebLogic Server (WLS) 7.0 and 8.1 in production environments and development
- BEA WebLogic Portal (WLP) 4.0 and 7.0
- Oracle 9i

Jan. 2004 - Feb. 2004

Freelance consultant and software architect at swisscom mobile, Bern

- Development of a prototype for a mobile phone internet portal with complex interactive business processes.
- Development of the application's architecture and intensive guidance/instruction of the IT architects there regarding this
- Strict separation of business logic (data and business processes) and presentation layer (portal)
- Design and implementation of the mechanisms of interaction between workflow management system (WLI) and portal framework (WLP)
- Design and implementation of the business processes in WLI
- Design and implementation of the presentation layer as a mobile phone WAP portal using PageFlows in WLP
- Development of a tag library to simplify the generation of XML pages in WLP
- Integration in and connection to existing systems (WAP rendering engine, customer information, charging, billing, SMS/MMS and streaming services)
- Keywords:
 - o BEA WebLogic Integration (WLI) 8.1
 - o BEA WebLogic Portal (WLP) 8.1
 - o BEA WebLogic Workshop (WLW) 8.1
 - BEA WebLogic Server (WLS) 8.1
 - o Sun Java SDK 1.4.2
 - o Sun Solaris 9.0, Microsoft Windows XP Professional

July 2001 - May 2003

Development in cooperation with several partners, Hannover

• Development of an object-oriented workflow management system which can be integrated into existing (heterogeneous) IT infrastructures for controlling modeled business processes within new and between existing applications in the sense of enterprise application integration (EAI).

• Features:

- Modeling of business processes in UML allowing the use of standard tools (e.g. IBM Rational Rose, Together)
- No breach of paradigm between business process and business object model
- Multi-channel capability (frontends in Java, HTML, WAP etc. possible simultaneously)
- Business processes can be modeled subject to exclusively professional criteria; their pertinent proceedings in the various frontends are defined separately
- Integration into existing organizational models, enterprise information systems (RDBMS, legacy systems) etc. possible
- Own application server, based on CORBA (transparent persistence with fine-grained transaction security, well-engineered component model)
- High degree of reusability (for classes, process steps and within compositions)
- Fulfilment of highest production requirements (full scalability, security, performance)

• Keywords:

- o Sun Java SDK 1.4.2
- CORBA 2.4.2 (OpenORB 1.3.0) and J2EE 1.3
- o IBM Rational Rose 2000e
- o ANTLR 2.7.2
- o Microsoft Windows 2000 Professional Edition
- o Netbeans 3.4
- o CVS 1.11 and WinCvs 1.3
- Altova XML Spy 4.2

Aug. 2000 - June 2001

Freelance consultant and systems analyst at 'dvg', Hannover [developer of software for banks]

- Responsible for the development of the server component of an objectoriented workflow management system within a large-scale project for a bank
- Consulting regarding the design and implementation of other components
- Keywords:
 - C++ under WindRiver SNIFF+ 3.2.1
 - o CORBA 2.3 (BEA WebLogic Enterprise 4.0)
 - o Sun Java SDK 1.3
 - o IBM Rational Rose 98i and 2000e
 - o Xerces-C 1.1.0 and Xerces-J 1.3.1
 - o Oracle 8.0.6.1
 - o Sun Solaris 5.6 and CDE 1.2, Microsoft Windows 2000
 - o IBM Rational ClearCase 3.2.1+, IBM Rational Purify
 - o Symantec Visual Cafe 3.0c and 4.0a
 - Altova XML Spy 3.5

Sep. 1999 - June 2000

Freelance consultant/systems analyst at 'Volkswagen AG', Wolfsburg [car manufacturer]

- Responsible for various tasks in the further development of a client/ server based international workshop information system for descriptive representation and graphical visualisation of all vehicle data relevant for repair in different information means
- Consulting regarding the design of relational databases for other projects
- Responsible for the development of a WEB-based system for the generation of registration keys for the workshop information system
- Keywords:
 - Microsoft Visual C++ 6.0, Visual Source Safe 6.0
 - COM/DCOM, Active X
 - MFC/ATL
 - o ODBC, Access 97, Oracle 8.0.5, design of relational databases
 - o XML, DOM
 - Java SDK 1.1.8
 - Java Servlet Development Kit (JSDK) 2.0
 - o JDBC
 - WEB-Server Apache 1.3.12
 - o Windows/NT 4.0

Nov. 1998 - July 1999

Freelance instructor of various seminars at different locations for company 'DITEC Informationstechnologie GmbH & Co. KG'

Subjects:

- C/C++
- Microsoft Visual C++, MFC, SQL-Server programming
- COM/DCOM, ATL, ActiveX
- Oracle 8.0

Aug. 1997 - Oct. 1998

Freelance consultant/systems analyst in several projects for 'HDI Informationssysteme Gesellschaft für Anwendungsentwicklung mbH', Hanover [development of applications for insurance company]

- Development of an information system in sales for five insurance branches of the 'HDI' in a team of 10; responsible for the branch 'accident'
- Support in the design and implementation of a system in the printing of text components for multiple use by different applications
- Responsible for the development of a system for the construction, alteration and administration of (hierarchic) text components
- Design and implementation of a system for the administration of reinsurance-strategy tables in the project 'reinsurance identification'
- Analysis and design of an information system for 'Postbank' insurance products
- Design and implementation of reusable components for various purposes (printer access, tree view control)
- Keywords:
 - o Smalltalk (IBM Visual Age for Smalltalk 3.1 and 4.0)
 - o Windows/NT 4.0, Windows 95, Windows 3.11
 - o Informix under Unix, Watcom/SQLAnywhere under Windows
 - o object-oriented methodology, model-view-controller, Paradigm Plus, **UML**

Mar. 1993 - June 1997

Freelance work for 'TÜV Hannover/Sachsen-Anhalt' [Technical Control Association Hanover/Saxony-Anhalt]

- Responsible for the design and implementation of a multi-terminal program for an order processing and scheduling system for assessment of the quality of stationary systems and plants including a modem link with the experts' MS-DOS laptops
- Consulting regarding comprehensive problems in system administration, support for the design and implementation of other projects
- Keywords:
 - ° C, ESQL/C, 4GL
 - o database design and programming using Informix
 - o SINIX
 - o RPC, remote data transmission

July 1992 - Sep. 1992

Freelance work for 'GSSE Braunschweig' [software development company]

- Consultation regarding the design and support for the implementation of a robot stock-keeping system
- Keywords:
 - o Informix
 - o C, SINIX
 - o relational database design, ER diagrams

Feb. 1990 - Feb. 1993

Freelance instructor of various seminars (mainly for Siemens/SNI and Digital/DEC) and consulting

Subjects:

- C/C++
- Systems programming under Unix
- System administration and networks under Unix
- Informix, 4GL
- MS-Windows, MS-Office

Oct. 1989 - Jan. 1990

Freelance work for 'Staatsbad Salzuflen' [public spa]

- Consulting work for database design and support for the implementation of the complete spa administration software (redesign for the portation from BS2000 to SINIX) in a team of approx. 7
- Keywords:
 - o Informix
 - o C, ESQL/C, 4GL
 - o SINIX

Jan. 1989 - June 1989

Freelance work for 'Deutsche Bank Eschborn'

- Responsible for the development of an interface between mainframe and PC for a customer information terminal
- Keywords:
 - o Microsoft-C
 - o MS-DOS