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# **Curriculum Vitae**

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## 1 Personal information

- Personal:**           Date of birth:       23 January 1964  
                          Nationality:       Danish  
                          Marital status:   married  
                          Children:         3
- Degree:**            M.Sc.EE in System Engineering and Process Control at Aalborg University, Denmark 1989
- Foreign languages:** Danish:            fluent  
                          English:           fluent  
                          German:           fluent  
                          French:            working knowledge
- Personal profile:**   ”responsible, motivated, tolerant, trustworthy, constructive, independent, creative, entrepreneur, action-oriented, having a sense of humor” (Unik Personale)
- Current responsibility:**   Director for EMERCOS, a software consulting and development company.
- Professional expertise:**   Expert knowledge in development and system integration of management systems, particularly Tele Network Management and control/monitoring of trains. Broad experience in the field of distributed systems – both server and client side. Experience with the newest development tools and standards, such as J2EE/internet applications. Expert knowledge in the field of Oracle databases (DBA) and development.

## 2 Tools and technologies

### 2.1 Programming languages and tools

Tool / technology	Last used	experience (knowledge=* expert=*****)
Java	2007	*****
C/C++ ( gcc )	2007	*****
Microsoft Visual C++	2007	*****
Tcl/tk	2003	*****
Lex/Yacc	2002	****
Corba Tao	2005	****
Corba JacORB	2007	*****
RPC	1992	*****
Make	2004	*****
Ant	2007	*****
Maven2	2007	*****

### 2.2 Web/Internet tools/frameworks

Tool / technology	Last used	experience (knowledge=* expert=*****)
J2EE	2007	****
EJB	2006	****
EJB3	2006	***
Hibernate	2007	****
JPA	2007	***
Wicket	2007	****
JSP	2005	*****
JSF	2006	****
Oracle ADF JSF	2006	****
Struts	2005	*****
xDoclet	2006	***
Apache Http	2005	***
XML/XSL	2007	*****
Jaxb	2007	****
Jakarta Cocoon	2003	***
DHTML	2005	****
Javascript	2005	***
Oracle UIX	2004	***
JPublish	2004	**
FreeMarker	2004	**
HttpClient	2006	****
Apache Axis2	2006	****
AXIOM	2006	****
XmlBeans	2007	***
Xercesc	2007	****

## 2.3 UI framework

Tool / technology	Last used	experience (knowledge=* expert=*****)
X/Motif	1999	****
Java swing	2005	****
Oracle ADF Business Components	2005	*****
Oracle ADF Toplink	2005	**
Spring2	2007	****
Jasper	2006	***

## 2.4 Database technology

Tool / technology	Last used	experience (knowledge=* expert=*****)
Oracle 6-10g DBA	2007	****
Oracle PL/SQL	2007	*****
Oracle Forms	1999	*
Oracle Report	1999	*
Oracle Designer	2003	*
MySQL	2007	****
Oracle OCI	2004	****
Oracle Template Library (OTL)	2005	****
Oracle Pro*C	2000	****

## 2.5 Open source tools and frameworks

Tool / technology	Last used	experience (knowledge=* expert=*****)
Tomcat	2007	****
Jetty	2007	****
JBoss	2007	****
Apache webserver	2007	*****
Compiere	2006	*****
Ofbiz	2004	***

## 2.6 IDE

Tool / technology	Last used	experience (knowledge=* expert=*****)
JBoss IDE	2006	****
Oracle JDeveloper	2007	*****
Eclipse	2007	*****
IntelliJ IDEA	2007	***
Borland TogetherJ	2002	***

## 2.7 Test framework

Tool / technology	Last used	experience (knowledge=* expert=*****)
JUnit/CppUnit/HtupUnit	2007	****
Dejagnu/Expect	2003	****

## 2.8 Operating systems

Tool / technology	Last used	experience (knowledge=* expert=*****)
Unix DBA + internals	2005	****
Linux DBA + internals	2007	*****

LynxOS DBA + internals	1996	*****
OS-9 DBA + internals	1992	*****
MS-Windows DBA + internals	2007	***

## 2.9 Network protocols and framework

Tool / technology	Last used	experience (knowledge=* expert=*****)
SOAP (Web services)	2006	****
TeMIP	2003	*****
AdventNet SNMP	2007	*****
SNMP4J	2007	*****
Net-SNMP	2007	*****
SDH	2003	*****
SDH/Sonet MS-SPRing	2003	*****
MPLS	2003	*
TCP/IP	2003	*****
X.25	1992	*****
RS232	2004	****
Gigabit Ethernet	2003	*
DVB-SI	2007	****
DVB-EPG	2007	****

## 2.10 Desktop publishing tools

Tool / technology	Last used	experience (knowledge=* expert=*****)
MS-Word	2007	*****
MS-Excel	2007	***
Macromedia Dreamweaver	2004	****
Macromedia Flash	2004	*
MS-Visio	2003	****
Adobe Framemaker	1999	**
Corel Photopaint12	2007	*****
Corel Draw12	2007	*****
Documentum	2003	*
OpenOffice 2.3	2007	***
Trados 2007	2007	**

### 3 Professional experience

- 2007**                      **Emercos, Denmark (customer project)**  
 Projekt:                      Management interface for SAT200 satellite receiver  
 Projektfunktion:              [Konsulent] Developer  
 Tekno/værktøjer:              Eclipse, Java, SNMP4J, CORBA, Maven2
- 2007**                      **NOVO Kommunikation A/S**  
 Projekt:                      Furniture portal  
 Projektfunktion:              [Produktudvikling] Architect and developer  
 Tekno/værktøjer:              OpenCms, wicket, JPA, hibernate, spring2, Maven2
- 2007**                      **Emercos, Denmark**  
 Projekt:                      Projekt planning and issue reporterings system  
 Projektfunktion:              [Produktudvikling] Architect and developer  
 Tekno/værktøjer:              IDEA, wicket, hibernate, spring2, JPA, Maven2
- 2007**                      **Emercos, Denmark (customer project)**  
 Projekt:                      Electronic Program Guide (EPG) data import module  
 Projektfunktion:              [Konsulent] Architect and developer  
 Tekno/værktøjer:              IDEA, Spring2, hibernate, pl/sql, jaxb, Maven2
- 2007**                      **Emercos, Denmark (customer project)**  
 Projekt:                      Management interface for Thales Amber I + II multiplexers  
 Projektfunktion:              [Konsulent] Developer  
 Tekno/værktøjer:              Eclipse, Java, SNMP4J, CORBA, Maven2
- 2006**                      **NetworkRail, England**  
 Projekt:                      Design/implementation of train wheel data reporting system  
 Projektfunktion:              [Produktudvikling] Architect and developer  
 Tekno/værktøjer:              Oracle, PL/SQL, Jdeveloper, SFTP, JavaMail , JSF, ASF, JasperReport, Oracle, hibernate
- 2006**                      **Emercos, Denmark (customer project)**  
 Projekt:                      Design/implementation of DVB service activation module interfacing between Cherry Picker snmp traps og Tandberg nCompass DVB Management System.  
 Projektfunktion:              [Konsulent] Architect and developer  
 Tekno/værktøjer:              Eclipse, Java, SNMP4J, CORBA
- 2006**                      **Emercos, Denmark (customer project)**  
 Projekt:                      Xml protocol for remote interface to DVB management system  
 Projektfunktion:              [Konsulent] Developer  
 Tekno/værktøjer:              Eclipse, C++, XercesC
- 2006**                      **Emercos, Denmark (customer project)**  
 Projekt:                      Implementation interface module to VideoPropulsion DVB-ASI card.  
 Projektfunktion:              [Konsulent] Architect and developer  
 Tekno/værktøjer:              Eclipse, C++, XercesC, java, JNI, DLL
- 2006**                      **Emercos, Denmark (customer project)**  
 Projekt:                      Implementation SOAP interface to Tandberg nCompass DVB Management System  
 Projektfunktion:              [Konsulent] Architect and developer  
 Tekno/værktøjer:              Eclipse, java, JacORB corba, HttpClient, XmlBeans, AXIOM, Axis2 web services (SOAP)
- 2006**                      **Emercos, Denmark (customer project)**  
 Projekt:                      Implementation of snmp alarm/redundancy module for ROSA Element Manager

- Projektfunktion: [Consultant] Architect and developer  
 Tekno/værktøjer: Eclipse, AdventNet snmp, Net-snmp, java, JacORB corba
- 2006 Emercos, Denmark (customer project)**  
 Projekt: Implementation of snmp alarm module for D9032 mpeg2 encoder  
 Projektfunktion: [Consultant] Architect and developer  
 Tekno/værktøjer: Eclipse, AdventNet snmp, Net-snmp, java, JacORB corba
- 2006 Emercos, Denmark (customer project)**  
 Projekt: Implementation of snmp alarm module for Stellar XT mpeg2 decoder  
 Projektfunktion: [Consultant] Architect and developer  
 Tekno/værktøjer: Eclipse, AdventNet snmp, Net-snmp, java, JacORB corba
- 2005 Emercos, Denmark (customer project)**  
 Projekt: Implementation of snmp access module for Pro-bel Halo ASI/SDI router  
 Projektfunktion: [Consultant] Architect and developer  
 Tekno/værktøjer: Eclipse, AdventNet snmp, Net-snmp, java, JacORB corba
- 2005 Emercos, Denmark (customer project)**  
 Projekt: Implementation of snmp filter plugin.  
 Projektfunktion: [Consultant] Architect and developer  
 Tekno/værktøjer: Eclipse, AdventNet snmp, Net-snmp, java, JacORB corba
- 2005 Emercos, Denmark (customer project)**  
 Projekt: Implementation of a corba access module for SA DVP9600 Transport Stream multiplexer.  
 Projektfunktion: [Consultant] Architect and developer  
 Tekno/værktøjer: Eclipse, VC++, TAO-corba
- 2005 Networkrail, England**  
 Projekt: Implementation of generic reporting tool for use in relation with data-mining.  
 Projektfunktion: [Product development] Architect and developer  
 Tekno/værktøjer: JDeveloper, Jasper, tomcat, java
- 2005 Networkrail, England**  
 Projekt: Distribution of data via secure connection.  
 Projektfunktion: [Product development] Architect and developer  
 Tekno/værktøjer: JDeveloper, JBoss, EJB3.0, SSL, java stored procedures
- 2005 Networkrail, England**  
 Projekt: Installation of linux, Oracle and applications software on a productions server in a SAN cluster.  
 Projektfunktion: [Produktudvikling] Systemsintegrator og project manager  
 Tekno/værktøjer: JDeveloper, Redhat, Oracle 10, HP-SAN, Java-webstart, tomcat
- 2005 Emercos, Denmark**  
 Project: Implementation of Compiere CRM/ERP system, including development of specific modules.  
 Project function: [Product development] Architect and developer  
 Tech./tools: Java, J2EE, Oracle 10g database, java swing, java webstart, DHTML, Javascript, JSP, Struts, Tomcat, JBoss, Oracle JDeveloper, Oracle ADF Business Components
- 2004-2005 Networkrail, England**  
 Projekt: Development of Wheel Monitor System for an English customer. Complete surveillance system used by train operators for monitoring the conditions of wheels. The system includes a server for collecting the data, java swing and web client applications, including alarm display, graphical trending, data mining, reporting, user profiles and authentication.  
 Project function: [Product development] Architect and developer

- Tech./tools: C++, Java, J2EE, Oracle 9i/10g database, OTL, java swing, java webstart, DHTML, JSP, Struts, Tomcat, Oracle JDeveloper, Oracle ADF Business Components
- 2004 Zonith, Denmark**  
 Project: Surveillance and control system for UPS diesel power generators.  
 Project function: [Consultant] Developer  
 Tech./tools: Java, J2EE, DHTML, Javascript, JSP, Struts, Tomcat, Eclipse
- 2004 Emercos, Denmark**  
 Project: Portal and Forum system. Complete CMS with wysiwyg html-editor, user registration, access-control, admin tools, picture gallery, file upload, product catalogue.  
 Project function: [Product development] Architect and developer  
 Tech./tools: Java, J2EE, MySQL, DHTML, Javascript, JSP, Struts, Tomcat, Oracle JDeveloper
- 2004 Emercos, Denmark**  
 Project: FAQ system. Includes wysiwyg html-editor, user registration, access-control, admin tools, picture gallery, file upload.  
 Project function: [Product development] Architect and developer  
 Tech./tools: Java, J2EE, MySQL, DHTML, Javascript, JSP, Struts, Tomcat, Oracle JDeveloper
- 2004 CodeDroids, Denmark**  
 Project: CRM and Content Management System  
 Project function: [Consultant] Developer  
 Tech./tools: Java, J2EE, Oracle DBA, DHTML, Javascript, JSP, Struts, Oracle JDeveloper
- 2003-2004 Tellabs, Denmark**  
 Project: 6300 Element and Network Manager product. MS-SPRING komponent.  
 Project function: [Employee] Architect  
 Tech./tools: SDH, MS-SPRING protection mechanism
- 2003-2004 Tellabs, Denmark**  
 Project: 6300 Element and Network Manager product. Northbound api for OEM solutions.  
 Project function: [Employee] Project manager and developer  
 Tech./tools: Java, Apache, Http/XML, SDH
- 2003-2004 Tellabs, Denmark**  
 Project: 6300 Element and Network Manager product.  
 Project function: [Employee] System engineering and product planning.  
 Tech./tools: Oracle DBA, Oracle Designer, Oracle JDeveloper, C/C++, Java, XML, SDH, MS-SPRING beskyttelses teknologi, Gigabit-ethernet, MPLS
- 2003-2004 Tellabs, Denmark**  
 Project: 6300 Element and Network Manager product. Chinese localization project.  
 Project function: [Employee] Project manager  
 Tech./tools: C/C++, Java, XML, SDH
- 2003 Quantum, USA**  
 Project: CRM/ERP system for photo laboratories.  
 Project function: [Consultant] Developer  
 Tech./tools: Java, J2EE, Oracle DBA, EJB, JSP, xDoclet, JBoss, Eclipse, JBoss IDE, Oracle JDeveloper
- 2003 Emercos, Denmark**  
 Project: Open source CRM/ERP system for SME companies  
 Project function: [Product development] Developer  
 Tech./tools: Java, J2EE, Oracle DBA, Java swing, EJB, JSP, xDoclet, JBoss, Eclipse

- 2000-2003 Netman aps, Denmark**  
Project: Tele Network Management systems for surveillance and provision of SDH and ATM networks.  
Project function: [Employee] Systems Analyst (designer, developer, tester)  
Tech./tools: Oracle DBA, Oracle OCI, PL/SQL, C/C++, Java, Java swing, XML/XSL, CppUnit, JUnit, dejagnu/expect, Corba, TeMIP, SNMP, SDH, IP, Unix internals, TogetherJ, UML, Unified Software Development Process
- 2000-2003 Netman aps, Denmark**  
Project: TeMIP Service Monitor. OSI event monitoring and synchronization.  
Project function: [Employee] Developer.  
Tech./tools: C/C++, CppUnit, dejagnu/expect, TeMIP, SDH, Unix internals, UML, Unified Software Development process
- 2000-2003 Netman aps, Denmark**  
Project: TeMIP Service Monitor. Service action on OSI events and alarm scheduling.  
Project function: [Employee] Architect and developer  
Tech./tools: C/C++, CppUnit, dejagnu/expect, TeMIP, SDH, Unix internals, UML, Unified Software Development Process
- 2000-2003 Netman aps, Denmark**  
Project: TeMIP Service Monitor. "What-if" analysis tool.  
Project function: [Employee] Architect and developer  
Tech./tools: C/C++, CppUnit, dejagnu/expect, TeMIP, SDH, Unix internals, UML, Unified Software Development Process
- 2000-2003 Netman aps, Denmark**  
Project: TeMIP Service Monitor. Network model specification tool.  
Project function: [Employee] Architect and developer  
Tech./tools: C/C++, XML/XSL, Lex/Yacc, CppUnit, dejagnu/expect, TeMIP, SDH, Unix internals, UML, Unified Software Development Process
- 2000-2003 TDC AlarmNet, Denmark**  
Project: TeMIP GAT access module for TDC Alarm Network.  
Project function: [Consultant] Architect and developer  
Tech./tools: C/C++, TeMIP GAT-toolkit, Unix internals, UML, Unified Software Development Process
- 2000-2003 TDC AlarmNet, Denmark**  
Project: TeMIP Corba access module for TDC Alarm Network.  
Project function: [Consultant] Architect  
Tech./tools: C/C++, TeMIP, CORBA, EJB, Oracle J2EE, PL/SQL, Unix internals, UML, Unified Software Development Process
- 2000-2003 E-Plus, Germany**  
Project: SNMP trap server. Analysis, multi-protocol forwarding and logging of SNMP traps.  
Project function: [Consultant] Architect and developer  
Tech./tools: C/C++, CppUnit, dejagnu/expect, SNMP, Net-SNMP, Unix internals, UML, Unified Software Development Process
- 1999-2000 Honeywell A/S, Denmark**  
Project: Train wheel monitoring system  
Project function: [Consultant] Systems architect and developer  
Tech./tools: Oracle DBA, Oracle Pro\*C, C, X/Motif, Unix internals
- 1999 Ascom A/S, Denmark**  
Project: Payphone management system. Northbound interface for STC and police (Saudi Arabia).

Project function: [Employee] Systems architect and developer  
 Tech./tools: Oracle DBA, Oracle Forms, Oracle Reports, Oracle Designer, Oracle Pro\*C, C, X/Motif, Unix internals

**1998-1999 Brüel&Kjær Sound and Vibration A/S, Denmark**  
 Project: Generic data-merge tool for data stored in Oracle databases.  
 Project function: [Consultant] Architect and developer  
 Tech./tools: Oracle DBA, Oracle OCI, Unix internals, tcl/tk

**1996-1999 AdTranz Signal A/S, Denmark**  
 Project: System and architectural design, release coordination, evaluation of the newest software development methods and tools.  
 Project function: [Employee] Systems engineer.  
 Tech./tools: ESA Software Engineering Standards

**1996-1999 AdTranz Signal A/S, Denmark**  
 Project: Platform for train management applications.  
 Project function: [Employee] Architect and developer  
 Tech./tools: Oracle DBA, Oracle Pro\*C, C, X/Motif, Unix internals, tcl/tk

**1996-1999 AdTranz Signal A/S, Denmark**  
 Project: Generic data-merge tool for base-, admin- and site-data.  
 Project function: [Employee] Systems engineer and developer  
 Tech./tools: Oracle DBA, Oracle Pro\*C, C, X/Motif, Unix internals, tcl/tk

**1993-1996 R&D Staff at CERN, Genève, Switzerland**  
 Project: Responsible for software development in the AT/VA group.  
 Project function: [Employee] Working principal.  
 Tech./tools: ESA Software Engineering Standards, Performance appraisal

**1993-1996 R&D Staff at CERN, Genève**  
 Project: Logging system for vacuum data  
 Project function: [Employee] All Development functions  
 Tech./tools: Oracle Pro\*C, Oracle Forms, Oracle Reports, Web-CGI, TCL/TK, C, X/Motif, HP-UX unix

**1993-1996 R&D Staff at CERN, Genève**  
 Project: GUI for Vacuum Kontrolsystem (delvist outsourcing)  
 Project function: [Employee] Architect, project manager and developer  
 Tech./tools: Oracle Pro\*C, Oracle Forms, Web-CGI, TCL/TK, C, X/Motif, HP-UX unix

**1993-1996 R&D Staff at CERN, Genève**  
 Project: Accelerator layout CAD system  
 Project function: [Employee] Architect, project manager and developer  
 Tech./tools: Oracle Pro\*C, Oracle DBA, PL/SQL, C, X/Motif, HP-UX unix, OpenGL

**1993-1996 R&D Staff at CERN, Genève**  
 Project: Web browser for the accelerator inventory database  
 Project function: [Employee] Architect, project manager and developer  
 Tech./tools: Oracle Pro\*C, Oracle DBA, C, CGI, Tcl

**1993-1996 R&D Staff at CERN, Genève**  
 Project: Design studies for object oriented accelerator control systems  
 Project function: [Employee] Architect, project manager, developer  
 Tech./tools: Konference bidrag at EPAC'94, OMT, Booch, C/C++

- 1993**                      **CERN SL/PC, Genève**  
Project:                      Data compressing algorithms  
Project function:            [Consultant] All development functions.  
Tech./tools:                LynxOS internals, C
- 1993**                      **CERN SL/PC, Genève**  
Project:                      Control algorithms for step-response optimizations.  
Project function:            [Consultant] All developer functions  
Tech./tools:                LynxOS internals, C
- 1993**                      **CERN CN/CE, Genève**  
Project:                      LynxOS device driver for Inter Etherexpress16 ethernet PC card.  
Project function:            [Consultant] All development functions.  
Tech./tools:                LynxOS internals, C
- 1993**                      **CERN SL/OP, Genève**  
Project:                      Software requirement documentation for a Video Switch System for the main control room.  
Project function:            [Consultant] Software architect  
Tech./tools:                ESA Software Engineering Standards
- 1993**                      **CERN AT/VA, Genève**  
Project:                      Alarm server  
Project function:            [Consultant] All development functions.  
Tech./tools:                LynxOS internals, C
- 1990-1992**                **R&D Fellowship at CERN, Genève**  
Project:                      Implementation of a diskless LynxOS VME server  
Project function:            [Employee] All development functions.  
Tech./tools:                Boot-P protocol, LynxOS internals, C
- 1990-1992**                **R&D Fellowship at CERN, Genève**  
Project:                      Implementing LynxOS device driver for X.25/RS232 terminal server  
Project function:            [Employee] All development functions  
Tech./tools:                LynxOS internals, C, ITU-T X.25
- 1990-1992**                **R&D Fellowship at CERN, Genève**  
Project:                      Implementation of 'Equipment Directory Unit'. A front-end server for surveillance and control of accelerator equipment.  
Project function:            [Employee] All development functions  
Tech./tools:                LynxOS internals, C, TCP sockets, RPC
- 1989-1990**                **Master thesis work at CERN, Genève**  
Project:                      Development of an ethernet piggyback interface for the M68020 platform.  
Project function:            [Employee] All development functions  
Tech./tools:                Xilinx FPGA, P-CAD, M68020 ASM
- 1989-1990**                **Master thesis work at CERN, Genève**  
Project:                      Development of an OS-9 device driver for ethernet. Portation of the TCP/IP stack to OS-9.  
Project function:            [Employee] All development functions  
Tech./tools:                OS-9 embedded operative system, C, M68020 ASM, TCP/IP

## Training

- 2005
  - Compiere Technical Training (24h), Bonn
  - Compiere Intensive Training (40h), Bonn
- 2002
  - Oracle9i new features (dba) (37h)
  - Design Patterns (GOF) (1 semester)
- 2001
  - OOAD, UML (1 semester)
  - Unified Software Development Pro\*CESS (1 semester)
- 2000
  - SDH Network Standards (21h)
  - TeMIP Visual TeMIP (40h)
- 1998
  - PL/SQL (14h)
  - Oracle7 Database Administration I (28h)
  - Oracle7 Performance Tuning (28h)
- 1996
  - Object-Oriented Analysis and Design (24h)
- 1995
  - Microsoft Visual C++ and Microsoft Foundation Class Library under Windows (40h)
  - ORACLE Developer/2000 Core Technology (8h)
  - ORACLE Developer/2000 Forms 4.5 Essential Techniques (32h)
  - EN/ISO 9000 Auditor (40h)
- 1994
  - Performance Appraisal Workshop - MOAS (16h)
  - MBA program: "International Business, BUS500" Webster University (32h)
  - MBA program: "International Business Law, INB563" (32h)
  - MBA program: "Accounting Theory and Practice, BUS560" (32h)
- 1993
  - French course: "Grammaire syst. & orth. 2" Cours Commerciaux de Genève
  - German course: "Zentrale Oberstufen Prüfung (ZOP)" Cours Commerciaux de Genève
  - English course: "Advanced Composition, LLN102" Webster University
  - MBA program: "Current Economic Analysis, BUS562" Webster University (32h)
- 1992
  - French course: "Grammaire syst. & orth. 1" Cours Commerciaux de Genève
  - Building Object Oriented Systems with C++ (32h)
- 1989
  - The OS-9 Operating System (40h)
  - Transputer Workshop (OCCAM programming)

