

# Curriculum Vitae

## Personal Information:

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Name: **Dr. Andrae Behrens**

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Address: Stangenröner Str. 68  
08485 Lengenfeld

Date and place of birth: 21.12.1963, Leipzig, Germany

## Education:

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1987 – 1992 **Chemnitz University of Technology, Chemnitz, Germany**  
PhD in Automation Engineering  
**Thesis Title: "Predicate transition nets to control processes"**

1983 – 1987 **Chemnitz University of Technology, Chemnitz, Germany**  
Master of Science degree in Automation and Control

## Professional Experience:

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01.1992 – until now **Gesellschaft für Prozessautomation & Consulting mbH (GPC mbH), Lengenfeld, Germany**  
Position: owner and CEO

- Technical services in the field of automation / control systems, simulation and software development

01.2019 – until now **Bombardier Transportation GmbH, Hennigsdorf, Germany**  
Sector: Vehicle manufacturing, Railway passenger trains  
Position: Requirements and Software Engineer, Software Architect

- Design and development of safety relevant software according to European Railway Safety Standards EN 50128 & EN 50657

11.2017 – 12.2018 **Lenze Automation GmbH, Aerzen, Germany**  
Sector: Automation & Control, Drive Axes Motion Control  
Position: Concept and Software Engineer, Software Architect

- Design and development of PLCopen conform motion control and robotics software

05.2017 – 11.2017 **Bombardier Transportation GmbH, Hennigsdorf, Germany**  
Sector: Vehicle manufacturing, Railway passenger trains  
Position: Requirements and Software Engineer

- Design and development of safety relevant software according to European Railway Safety Standards EN 50128 for TCMS

11.2016 – 04.2017 **SEW Eurodrive GmbH & Co KG, Germany**  
Sector: Vehicle manufacturing, Automated Guided Vehicles  
Position: Concept and Software Engineer

- Collision prediction algorithms, transport optimization, data base communication to superior production control systems

01.2014 – now **Eurolan Systemtechnik GmbH for Queisser Pharma GmbH & Co. KG / Nintendo of Europe GmbH, Germany**  
Sector: Vehicle manufacturing, Railway passenger trains  
Position: Concept and Software Engineer, Software Architect

- Design and development of logistic flow controller software coordinating S7 PLCs and communicating with SAP / AS400 systems

- 03.2010 – 10.2016      **Bombardier Transportation GmbH, Hennigsdorf, Germany**  
Sector: Vehicle manufacturing, Railway passenger trains  
Position: Requirements and Software Engineer, Task/Team Leader
- Design and development of safety relevant software according to European Railway Safety Standards EN 50128 for TCMS
- 12.2009 – 02.2010      **Reintjes GmbH, Hameln, Germany**  
Sector: Mechanical Engineering, Marine Gearboxes  
Position: Software Engineer
- Porting of FORTRAN based engineering software to C/C++
- 11.2008 – 11.2009      **GPC mbH, Germany**  
Sector: Industry  
Position: Software Engineer
- Poses++ animation client, Client-API modules for C# and Java
- 07.2008 – 10.2008      **German software house supervised by Computer Futures Solution Deutschland Limited, Germany**  
Sector: Public Authorities  
Position: Software Engineer, Management Consultant
- Development of software system for calculations of periodical settlements
- 02.2006 – 06.2008      **GPC mbH, Germany**  
Sector: Industry / heavy machinery industry  
Position: Software Engineer, Team Leader
- Further development of simulation system Poses++; simulation consulting projects based on Poses++; Development of Linux kernel driver for PCI cards, emulation of PROFIBUS-slaves
- 04.2005 – 01.2006      **Saarstahl AG, Völklingen, Germany**  
Sector: Iron and steel industry  
Position: Software Engineer, Technical Consultant
- Development of simulation model for the whole material flow in a bar rolling plant to estimate and optimize modernization concepts
- 02.2003 – 03.2005      **SMS Demag AG**  
Sector: Mechanical Engineering, Iron and steel industry  
Position: Software Engineer, Team Leader
- Development of a hybrid real time simulation system for Hardware-In-The-Loop tests of automation equipment
- 12.2009 – 02.2010      **Volkswagen Sachsen GmbH, Germany**  
Sector: Automotive industry  
Position: Software Engineer, Software Architect
- Development of a model based material (car) tracking system

## **Skills and competences:**

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- Languages: German (native), English (very good)
- Very good knowledge of: C, C++, UNIX, Delphi/Pascal, Win32 API, Tcl/Tk, Databases (Oracle, Sybase, MS-SQL, MySql, etc.), Visual C++, Borland C++, GNU gcc, C#/ .NET, Network (TCP/IP, UDP), Linux, Automation, PLC, CoDeSys, Multiprog, Simatic, Modeling & Simulation, Process Optimization, Perl, Python, PHP, Tcl/Tk, Java, Lua, HTML, XML, UML/SysML, EA, VBA, Accurev, Subversion, ClearCase, ClearQuest, Installshield, NSIS, AutoCAD, FORTRAN, PLZ