David Niehaus Drosselgasse 16a D-21702 Ahlerstedt

## 1

# CURRICULUM VITAE

Ahlerstedt, March 11, 2013

David Niehaus Drosselgasse 16a D-21702 Ahlerstedt

### 2

## PERSONAL DATA:

November 21st 1969 **Date of birth** 

Borken/Westphalia Place of birth

Married Marital status

German Nationality

Ida(\*March 6th 2006), Jette(\*May 14th 2008) Children

Software Architect/Engineer Current position

Since 1998 Work experience

CURRICULUM VITAE: FREELANCER

LeitEnergie, Minden 10/2011-today

Software Architect/Engineer Position

Minden Located

Design and development of an operators diary for biogas plants, Responsibilities Architecture and design modeling, tool chain definition and realisation, project management as well as software implementation and test.

ReGLaN-Health, Landau 01/2003-today

Research Engineer Position

University of Koblenz-Landau, Landau i.d. Pfalz Located

Data Modeling and adaptive Programming,

Responsibilities

OPTIMIZATION OF THE HEALTH SERVICES PROVIDED IN RURAL COMMUNITIES,

Definition of the Meta Model, object oriented analysis and design for the software, design and implementation of the graphical user interfaces, planning and realization of the distributed development environment.

Voith Engineering Services GmbH, Bremen 1/2009-3/2012

Research Engineer/Manager Position

AIRBUS GmbH, Hamburg-Finkenwerder and Buxtehude Located

Service Oriented Architecture for Airlines (SO4A)

Definition of modeling processes, tool chain definition, training, project and supplier management for the SO4A project. SO4A is funded by the German

government program LuFo IV.

AIRBUS CIMPA GmbH, Hamburg 10/2008-1/2009

Research Engineer/Manager Position

AIRBUS GmbH, Hamburg-Finkenwerder Located

Concept study within SPEEDS project: Virtual configuration and integration

Responsibilities

Responsibilities

of IMA modules.

Model based engineering to support Failure Mode and Effect Analysis(FMEA), Fault Tree Analysis(FTA), Functional Hazard Analysis(FHA) as well as the Fault Detection Specification(FDS).

CeBe-Network, Bremen 10/2008-12/2008

Research Engineer/Manager Position

AIRBUS GmbH, Hamburg-Finkenwerder and Buxtehude Located

Service Oriented Architecture for Airlines (SO4A) Responsibilities

Definition of modeling processes, tool chain definition, project and supplier management for the SO4A project. SO4A is funded by the German

government program LuFo IV.

CeBe-Network, Bremen 1/2008-9/2008

System Designer Position

AIRBUS GmbH, Hamburg-Finkenwerder and Buxtehude Located

Project management and a software architecture for a content management Responsibilities

system and a 3D web-portal design.

Software architecture definition, specification, project and supplier management for a distributed (on-board and off-board) web portal for future

AIRBUS aircrafts.

**CeBe-Network, Bremen** 4/2007-12/2007

System Designer Position

AIRBUS GmbH, Hamburg-Finkenwerder and Buxtehude Located

Concept design, requirement generation and validation, conceptual integration and vendor management for the on-board network server system AirLiner Network Architecture(ALNA).

Responsibilities

CURRICULUM VITAE: EMPLOYMENT

Bishop GmbH, Hamburg 1/2005-3/2007

A380 Cabin-OMS Designer Position

AIRBUS GmbH, Hamburg-Finkenwerder Located

Concept design, requirement generation and validation, conceptual Responsibilities integration and vendor management for the cabin onboard maintenance

system(Cabin-OMS).

 $\label{lem:condition} Design and specification of a Local Maintenance Function(LMF) and a Data \\ Loading and Configuration System(DLCS) for the Airliner Network$ 

Architecture(ALNA).

Failure Mode and Effect Analysis(FMEA) as well as the Fault Detection Specification(FDS) for ALNA hardware and software equipment.

Standardization of the maintenance data exchange via SNMP.

Standardization of the maintenance data exchange and design principles for middleware based architecture.

Bishop GmbH, Hamburg 2/2004-12/2004

Responsibilities

A380 BITE Manager Position

AIRBUS GmbH, Hamburg-Finkenwerder Located

Generation, implementation and validation of BITE requirements for cabin systems, supplier audits regarding BITE: cabin intercommunication network

system(CINS), cockpit door surveillance system(CDSS), cabin video

monitoring system(CVMS), cabin telephone system(CTS)

Concept development and implementation of test software to check the BITE related communication between cabin systems and the centralized

maintenance system (CMS)

Data loading coordinator

TUTECH GmbH, Hamburg-Harburg 11/2003-1/2004

Researcher Position

Computer Engineering VI (Distributed Systems), University of Technology Located

Hamburg-Harburg

Research project: Responsibilities

KNOWLEDGE- AND EVENT PATTERN BASED TECHNOLOGY TO DO

PREVENTIVE MAINTENANCE

AIRBUS, KID-Systems and the University of Technology Hamburg-Harburg Cooperation

Philotech GmbH, Unterhaching 10/2002-10/2003

> R & D Engineer Position

AIRBUS GmbH, Hamburg-Finkenwerder Located

Application and project planning in the scope of the German aviation research Responsibilities

program (LuFo III)

Concept development and implementation of a web-based information system

Design of the data model and the user concept for a Logistic Support

Analysis(LSA) development environment

Westfälische-Wilhelms-Universität, Münster 1/1999-9/2002

Programmer in the MEOW-VISUM Project Position

Concept development and implementation of a web-based teaching and Responsibilities

training environment

Build up and administration of a local area network

Invitation by the Edith-Cowan-University in Perth(Australia), in the scope of 7-8/2000

the MEOW-VISUM cooperation. Aim: Concept to link the two information

systems.

Engine overhaul, Lufthansa Technik AG, Frankfurt a.M. 1/1998-11/1998

> Contract of work Position

Production support, data and system servicing and solving special tasks Responsibilities

> **CURRICULUM VITAE:** ACADEMIC CAREER

11/2010 TdSE 2010, Gesellschaft für Systems Engineering e.V., German Chapter

of INCOSE, Munich, Germany

Application of the Systems Engineering Approach to a sustainable decision Subject

support system for health services

9/2010 User forum on Model-Based Systems Engineering, Informatics and

Cybernetics, Hamburg (Airbus), Germany

Validating system architecture in early design phases; Stephan Marwedel, Subject

Rainer Diekmann, David Niehaus

19th International Conference on Systems Research, Informatics and 7/2007

Cybernetics, Baden-Baden, Germany

Application of OOA to a sustainable decision support system for health Subject services

> Phone.: +49 4166/848781 Mobil: +49 151/23002737 Mail: DavidNiehaus@gmx.de

7

11th International Society for Telemedicine and eHealth (ISfTeH), Cape Town, South Africa

PROVIDING HEALTH FOR RURAL COMMUNITIES Subject

22nd meeting Artificial Intelligence (AI-98) at the University of Bremen, 9/1998

Bremen Germany

An adaptive model for simulation and optimization of the production process Subject (of overhauling aircraft engines) using the theory of artificial neural networks

CURRICULUM VITAE: EDUCATION

University of Applied Science, Aachen

Diploma degree, Aeronautics and space engineering 11/1998

Aircraft Propulsion Systems Specialization

Presentation of the diploma thesis at the 22nd meeting Artificial Intelligence 9/1998

(AI-98) at the University of Bremen

An adaptive model for simulation and optimization of the production process Thesis

(of overhauling aircraft engines) using the theory of artificial neural networks,

in collaboration with Lufthansa Technik AG

Software to optimize the turn around time of aircraft engines, in collaboration Student project

with Lufthansa Technik AG

FKA Automotive Research Center, Technical University Aachen Student assistant

Engine overhaul, Lufthansa Technik AG, Frankfurt a.M. Practical semester

Piston engine overhaul, Storm GmbH, Coesfeld Basic practical

MILITARY SERVICE:

Army overhaul and repair battalion 120., Rheine 7/1990-6/1991

CURRICULUM VITAE: EDUCATION

Technical grammar school, Borken/Westphalia

Matriculation standard 6/1990

## Hesselbein GmbH & Co. KG, Borken/Westphalia

Employment as a car mechanic 2/1989-7/1989

Apprenticeship as a car mechanic 8/1986-1/1989

Städtische Realschule, Stadtlohn

Secondary School 1986

**Von-Galen-Grundschule**, Oeding

Primary School 1980

Phone.: +49 4166/848781
Mobil: +49 151/23002737
Mail: DavidNiehaus@gmx.de

## IT BACKGROUND:

#### **Freelancer**

LEITENERGIE, MINDEN, 10/2011-today

Design and development of an operators diary for biogas plants, UML, Poseidon, java, maven, continuum, svn, javacc, rcp, netbeans, junit, internet communication engine ice, taskjuggler, MAC OS X, UNIX, LINUX, Windows

REGLAN-HEALTH, LANDAU

01/2003-today

Research Group Learning and Neuroscience, Health-Section

Data Modeling and adaptive Programming, - UML, Poseidon, java, maven, continuum, javacc, webstart, swing, prevayler,

eclipse, netbeans, xcode, MAC OS X, UNIX, LINUX, Windows, cms, typo3, joomla, subversion, cvs, Rich Client Programming

AIRBUS DEUTSCHLAND GMBH, 1/2009-3/2012

Service Oriented architecture for airlines -

CORE, MEGA, ML-Designer, Rhapsody, Flash AS, java, DODAF, SYSML,

MAC OS X, UNIX, LINUX, Windows, cvs

AIRBUS CIMPA GMBH, HAMBURG 10/2008-1/2009

Concept study within SPEEDS project -

Rhapsody, java, CORE, SYSML, MAC OS X, UNIX, LINUX, Windows

AIRBUS DEUTSCHLAND GMBH, 10/2008-12/2008

Service Oriented architecture for airlines -

CORE, MEGA, ML-Designer, DODAF, SYSML, MAC OS X, UNIX,

LINUX, Windows

AIRBUS DEUTSCHLAND GMBH, 1/2008-9/2008

Software architecture for a content management system and a 3D design

CORE, MEGA, UML, DOORS

AIRBUS DEUTSCHLAND GMBH, 4/2007-12/2007

Concept design for the Airliner Network Architecture(ALNA) - Ethernet, ARINC 429, ARINC 665, ARINC 615, ARINC 763, ABD 100.
ABD 200, DOORS, Corba, ACE TAO, JacORB, UML, LINUX, Java

#### **Employment**

AIRBUS DEUTSCHLAND GMBH, 2/2004-3/2007

- Concept design for the cabin onboard maintenance system(Cabin-OMS) Ethernet, ARINC 429, ARINC 665, ARINC 615, ARINC 763, ABD 100.

  ABD 200, DOORS
- Design and specification of a Local Maintenance Function(LMF) and a Data

  Loading and Configuration System(DLCS)

  LINUX, Java, Spring, UML, Ethernet, ARINC 429, ARINC 665, ARINC

  615, ARINC 763
  - Standardization of the maintenance data exchange SNMP
  - Standardization of the maintenance data exchange and design priciples for middleware based architecture

Corba, ACE TAO, JacORB, UML

Concept development and implementation of test software to check the BITE related network communication.

Compiler-Compiler JavaCC, Java, UML, Poseidon, GUI programming, AFDX, Ethernet, ARINC 429, ARINC 665, ARINC 615, ARINC 763,

DOORS.

AIRBUS DEUTSCHLAND GMBH, 10/2002-10/2003

Concept development and implementation of a web-based information system.

UNIX, PHP, MySQL, JavaScript HTML, XML, TScript (Typo3)
Design of the data model and the user concept for a LSA development
environment (Logistic Support Analysis). UML, Poseidon

WESTFÄLISCHE-WILHELMS-UNIVERSITÄT, MÜNSTER 1/1999-9/2002

Concept development and implementation of a web-based teaching and training environment.

 $HTML, Java Script, Perl, JAVA, Compiler-Compiler\ Java CC,\\$ 

GUI programming.

Build up and administration of a local area network.

Linux, WIN2K, NT, WIN9\*, Apache, Samba, NIS, DHCP, NFS, BIND

## **Projects**

An adaptive model for simulation and optimization of the production process The (of overhauling aircraft engines) using the theory of artificial neural networks.

Thesis

Object-PASCAL, Delphi

Software to optimize the turn around time of aircraft engines. Student project

PASCAL

Software to do data conversion, check and conflation.

Practical semester

F&A-Database, PASCAL, VISUAL-BASIC.

Simulation software to compare shift models. FORTRAN. Software modifications on the automatic driver and 4WD test-bench control.

Student assistant

Assembler, PASCAL.

Design of a gear box rattle rigg test-bench.

Student assistant

AUTOCAD.

#### **Studies**

Two semester course and practical training in FORTRAN. 1991-92

CATIA 2, Course at the Kernforschungszentrum Jülich 1992-93

**Technical grammar school** 

Advanced course BASIC. 1989-90

**Apprenticeship** 

Basic course BASIC. 1987-88

## **ADDITIONAL DETAILS:**

## Languages

Read, write and speaking fluently English

Native speaker German

## Qualifications

Microsoft Office applications, MS Project, VBA, Open Office, StarBasic, IT

DOORS reader/writer, Latex

Airbus A340-500/-600, Airbus A380 Cabin Systems Aircraft courses

Staff and project management courses Management

Motorcycles Hobbies

Ahlerstedt, March 11, 2013 David Niehaus