

Curriculum Vitæ

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CONTACT INFORMATION

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OBJECTIVE

Diplom thesis (Master) for Winter 2006/2007 in the research area of Computer-Supported Cooperative Work, Ubiquitous Computing and Human-Computer Interaction

EDUCATION

September 2005 –
February 2006

Visiting Research Student, University of Calgary, Canada
Department of Computer Science, GroupLab, Interactions Lab

Supervisor: Professor Dr. Saul Greenberg, Human-Computer Interaction

- Research project: Shared Phidgets – A Toolkit for Rapidly Prototyping Distributed Physical User Interfaces (Grade A, Germany 1.0) *
 - Infrastructure and toolkit for the remote access to shared sensors and actuators (Phidget components)
 - Component and user control library for .NET with software representations for all Phidget devices
 - Development of various Ubiquitous Computing example applications using the toolkit (e.g., RFID aware sensor/actuator control, Sensor maps)
 - Implementation: VisualStudio.NET, C#, .NET CF
 - <http://grouplab.epsc.ucalgary.ca/cookbook/>

October 2001 –
Present

Diplom “Media Systems” (Computer Science), GPA* 3.9,
at the Bauhaus University Weimar, Germany
Advanced study period, expected to graduate in Winter 2006/2007

Supervisor: Professor Dr. Tom Gross, Computer-Supported Cooperative Work

Major Subjects and Research Interests:
Computer-Supported Cooperative Work (CSCW), Ubiquitous Computing,
Tangible Computing and Human-Computer Interaction (HCI)

Research Projects:

- ‘Collaboration Bus’ HCI (Grade A, Germany 1.0)*
 - Development of a Graphical User Interface (GUI) to let end-users create new envisioned sensor-based applications
 - http://www.cmlab.net/tiki-index.php?page=RP_CollaborationBus

- ‘Sens-ation – Sensor and Actuator Infrastructure’ (Grade A, Germany 1.0)*
 - Development of a sensor infrastructure with easy integration of different sensor modules and providing of various interfaces (XML-RPC, AXIS/SOAP, HTML/PHP, etc.)
 - Technologies: Web services, mobile clients, business patterns, server technology, sensor/actuator hardware, XML descriptions
 - Implementation: J2EE, J2ME, SOAP, AXIS, XML-RPC, XML, XPath, XML Schema, PHP
 - http://www.cmlab.net/tiki-index.php?page=RP_Sens-ation_I
- ‘Swarm Intelligence’ (Grade A, Germany 1.0)*
 - Multi agent simulation system, based on the *ACluster* algorithm of V. Ramos and algorithms of E. Lumer & B. Faieta
 - Agent modelling, data mining, visualization, concurrent programming
 - Implementation: VisualStudio.NET, C++, OpenGL, GLUT, GLUI
 - <http://typo3.medien.uni-weimar.de/index.php?id=97>
- ‘Metacocon e-Learning’ (Grade A, Germany 1.0)*
 - Development of a tool for synchronizing an online platform with PIM (Personal Information Managers: Lotus Notes, Microsoft Outlook)
 - Implementation: VisualStudio.NET, Visual Basic, C++, PHP, COM (Component Object Model), vCard, vCal, iCal
 - <http://www.metacocon.net>

October 2001 –
April 2004

**Intermediate diploma “Media Systems“ (“Vordiplom”)
Grade A, Germany: 1.7***

Oral and written exam: Programming Languages and Software Engineering, Concurrent Programming, Fuzzy Logic Systems and Media Systems

October 2000 –
September 2001

**Student at the Faculty of Computer Science,
Technical University, Karlsruhe, Germany**

After the 2nd semester: enrolment at the Bauhaus University Weimar,
Studies: “Media Systems” (Applied Computer Science)

July 1990 –
June 1999

High-school diploma / A-levels (“Abitur”), Grade A, Germany: 1.5*

“St. Lioba Gymnasium”, Bad Nauheim, Germany
Special subjects: mathematics and physics

WORK EXPERIENCE

Since January 1997

Freelancer at the Konert Ingenieurgesellschaft mbH (Ltd)

Internet- and intranet-programming and design (PHP, HTML, CSS, JavaScript, SQL),
authoring presentation software, graphic design (<http://www.konert.de>)
(Reference: Dipl.-Ing., Dipl.-Oec. Ottmar Konert)

April 2006 –
August 2006

Research project supervisor “Swarm Intelligence II”

Research with swarm intelligence algorithms, cluster analysis, parallel algorithms
(Reference: Professor Dr. Bernd Fröhlich, Bauhaus University Weimar)

April 2005 –
June 2005

Teaching assistant “Webtechnologies I“

Server- and Client-Technologies, Markup Languages, XML, SOAP, XML-RPC, Sockets
(Reference: Professor Dr. Benno Stein, Bauhaus University Weimar)

May 2005 –
September 2005

Website-Development of the Website for the Faculty of Media

XHTML, CSS, graphic design, Typo3 content management system
(Reference: Professor Dr. Benno Stein, Bauhaus University Weimar)

October 2003 –
March 2004
and
April 2004 – July 2004

Teaching assistant

„Programming Lectures and Software Engineering“

Object-Oriented Programming, C++, STL, design pattern, SCHEME
(statically scoped, tail-recursive, LISP dialect), UML design
(Reference: Professor Dr. Bernd Fröhlich, Bauhaus University Weimar)

- June 2003 –
December 2003 **Assistant for the research project “Metacoon”, e-Learning platform**
Development: module for PIM data exchange (Personal Information Manager, e. g. Microsoft Outlook, Lotus Notes), COM – Component Object Model, SQL, Visual Basic interface, PHP
- October 2002 – 2003
and
October 2004 – 2005 **Orientation leader for new students at the Bauhaus University, Academic office**
Mentor for new students at their first semester, organizing events and workshops
- July 1999 –
June 2000 **Community service (in lieu of military service)**
“Kerckhoff” Hospital (Cardiology, Anaesthesia) in Bad Nauheim, Germany

SCHOLARSHIPS

- Since April 2005 **Scholarship of the German National Academic Foundation**
(Studienstiftung des deutschen Volkes)
- September 2005 –
February 2006 **Scholarship of the German Academic Exchange Service**
(Deutscher Akademischer Austausch Dienst - DAAD) for the research visit at the University of Calgary
- Since November 2005 **e-fellows.net Scholarship**
(Founded by McKinsey & Company Inc., Deutsche Telekom AG, etc.)

PUBLICATIONS

- 2006 Gross, T., Eglar, T. and Marquardt, N. (2006)
Sens-ation: A Service-Oriented Platform for the Development of Sensor-Based Infrastructures.
International Journal of Internet Protocol Technology (IJIPT) 1, 3 (2006). pp. 159-167.
(ISSN Online: 1743-8217, ISSN Print: 1743-8209).

TECHNICAL REPORTS

- 2006 Marquardt, N. and Greenberg, S. (2006)
Shared Phidgets: A Toolkit for Rapidly Prototyping Distributed Physical User Interfaces.
Technical Report 2006-829-22, Department of Computer Science, University of Calgary, Calgary, Alberta, Canada, T2N 1N4. April.
- Gross, T. and Marquardt, N. (2006)
CollaborationBus: An Editor for the Easy Configuration of Complex Ubiquitous Computing Environments.
Technical Report # BUW - CSCW - 2006 - 02, Computer - Supported Cooperative Work Group, Faculty of Media, Bauhaus - University Weimar, Bauhausstr. 11, 99423 Weimar, Germany, April.

VOLUNTEERING, SERVICE

- April 2004 and
April 2006 **Student Volunteer at the CHI 2004 and 2006 Conference**
Conference of the ACM: “Computer Human Interaction”, Vienna (Austria) and Montréal (Canada)
- June 2003 –
June 2004 **Member of the senate at the Bauhaus University**
Decision committee of the university. Members are the president of the university, the deans, professors, assistants and four students

June 2002 – June 2005	Member of the student representatives at the Faculty of Media Projects: Organizing various events for students, helping new students, Development of the website (Content Management System)
June 2002 – June 2005	Member of the evaluation committee at the “neudeli” entrepreneur centre, Weimar
June 2003 – December 2004	Member of the finance committee of the senate and member of the academic committee of the senate, Bauhaus University
January 2005 – June 2005	Member of the committee for technology and communication infrastructure, Bauhaus University
January 2004 – Present	Member of the university elections committee, Bauhaus University
January 2005 – September 2005	Member of the committee for research and science, Bauhaus University
June 2004 – June 2005	Member of the council at the Faculty of Media, Bauhaus University
January 2004 – June 2005	Member of the board of examiners for “Media Systems”, Bauhaus University
January 2004 – June 2005	Member of the academic commission at the Faculty of Media, Bauhaus University

PROFESSIONAL MEMBERSHIPS

ACM (Association for Computing Machinery),
IEEE (Institute of Electrical and Electronic Engineers, Inc.)

LANGUAGE SKILLS

GERMAN	mother tongue
ENGLISH	fluent
FRENCH	basics
SPANISH	basics

IT SKILLS

- **Programming languages:**
C#, C++, C, JAVA (SE, ME, EE), SCHEME, Pascal, Visual Basic
- **Internet/intranet development:**
PHP, JSP, JavaScript, HTML, CSS
- **Document formats:**
XML, XML Schema, XPath, UML
- **Platforms and frameworks:**
Windows (incl. Pocket PC and Tablet PC), Mac OS X, Linux, VisualStudio.NET 2003 and 2005, VisualStudio.NET Compact Framework
- **Science:**
Matlab, MathCAD
- **Office:**
Microsoft Office, Word, PowerPoint, Excel
- **Graphic design and layout software:**
Adobe Photoshop, PageMaker, InDesign, Acrobat, Macromedia Freehand, Director, Dreamweaver, Fireworks

REFERENCES

*References are available upon request.
Just send me an email, and I will answer you immediately.*

HOBBIES AND INTERESTS

- Culture: Theatre, Musicals
- Sports: Ballroom Dancing (Standard, Latin), Swimming, Skiing, Badminton

* University Grading Scales:

Germany: Six point grading scale, grades from 1 to 6, where 1 = excellent and 6 = fail

Canada/USA: Five point grading scale, where 4 = excellent and 0 = fail
GPA is the Grading Point Average
Letters for grades are A,B,C,D,F, where A = excellent and F= fail