Dr. Martin Faust
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28359 Bremen

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mobile ++49 176 811 51 553

VISUALIZATION • WEB

ARCHITECTURE • ENTERPRISE

DIGITAL MEDIA • INTERDISCIPLINARY

Technical Experience

- Web Application with React/Vue, JavaScript, NodeJS, JEST, Webpack and Sonar
- JavaScript, Java, C++, C#, Python
- Parametric/Interactive 3D Visualizations
- Virtual & Mixed Reality
- CPQ – Configure Price Quote
- REST Web Services, Specification/Verification with RAML
- Big Data Analytics, Simulation
- ElasticSearch, MongoDB, MySQL, PostgreSQL, MS SQL
- System and Software Architecture, Domain Driven Design
- Employee development

Qualifications and Certifications

- Software Architecture (by Prof. Dr. Michael Stal)
- Conflict management, Leadership without a disciplinary function
- SCRUM (by oose)

Skills

- Creative Thinking – bring in new ideas in challenging situations
- Decision Making – the ability to decide
- Risk Taking – take over responsibility for decisions
- Sales Ability – develop and expand existing customers
- Experience – more than 20 years

General

Languages	German (native), English (fluent)
Family Status	Married, 2 children, 1 dog
Date of Birth	26.06.1973 (Nationality German)

Experience

Feb. 2021 – today — Solution Architect
Jun. 2019 – Jan 2021 — Team Leader Visualization
Mar. 2014 – May 2019 — Software Architect/Lead Developer
encoway, Bremen

- CPQ – Configure Price Quote
- Topics: Visualization, Integration, AI, Rule Engine
- Architecture, Cloud, Consulting

Technology: JavaScript, React/Vue, C++, HTML5, Java, Cloud, Docker
Process model: Agile, Kanban, Scrum

Nov. 2013 – Mar. 2014 — Senior Software Architect/Developer
8.2 Monitoring, Hamburg

- Condition Monitoring of wind turbines and solar panels

Technology: C++, HTML, Linux

Aug. 2009 – Nov. 2013 — Senior Software Architect/Devloper, Project Manager
BTC Business Technology Consulting AG, Oldenburg

- Project management and customer support
- Research projects, fair management
- Training courses
- Application areas:
  - Smart Grids, CIM, IEC 61850
  - Virtual Power Plants, Wind Power Prediction
  - Renewable energies

Process model: SCRUM
Technology: .NET 4, Silverlight, Web Services, XML, IronPython, Java 2EE

Mar. 2007 – Sep. 2009 — Managing Director AG Digital Media
TZI - Center for Computing and Communication Technologies, Bremen

- Development and managing of cooperation with industrial partners
- Fair organization (IEEE Oceans 2009, Intergeo 2008)
- Writing and coordination of research proposals
- Development of a GIS system (maps.bremen.de)
- Technology transfer, e.g. display of web sites for color blind people
- Initiation of an audio special interest group
- Courses on computer games, audio, and image processing

Technology: C++, C#, Windows/Linux, HTML5, JavaScript

Jul. 2001 – Feb. 2007 — Research Assistant
artecLab://art/work/technology, University of Bremen

- Main topics: Mixed Reality, e-Learning, Computer Games
- EU IST Projects on Mixed Reality and e-Learning
- Technical organization of the SuperComputing 2001 conference
- Teaching

Technology: HTML, JavaScript, VRML, C++, Java

Okt. 1998 – Jun. 2001 — Software Developer
STN ATLAS Elektronic GmbH, Bremen

- International Software Project (3D graphic programming)
- Distributed Simulation (DIS/HLA), Parallel programming
- Documentation

Process model: V-Modell
Technology: C++, Ada, OpenGL, 3D modeling, SGI Irix, Linux

Studies

Apr. 2008	PhD (Dr-Ing., magna cum laude) "Multi-perspective in modeling and simulation " Aim of the work is to investigate how bridges between different representations of one system model can be established. A unified description is created supporting seamless blending between representation levels.
Oct. 1993 – Jul. 1998	Computer Science (Dipl.-Inf.) University of Bremen • Final grade: 1.1, Diploma thesis: 1.0
1998	Participant European School on Graph Transformation
Dec. 1995 – Apr. 1998	Student worker artec, University of Bremen • Exhibition at the Hannover Industrial Fair, 1996 • Invited talk at TU Vienna • Programming and system design for national project RUGAMS
May 1992	Secondary School Gymnasium, Achim Major in Math and Physics

Personal Interests

- Music, listening and making (piano, guitar)
- Nature as an inspiration and balance
- Books, e.g. Gharajedaghi, Systems Thinking: Managing Chaos and Complexity
- Cultures in general. I've learned much about cultures from my wife, colleagues and others.

Teachings (Excerpt)

SS 2008

- *Advanced Topics: Image Processing Algorithms behind GIMP/Photoshop*
  Master Digial Media, *English*, VAK: 03-05-H-804.5x, 2 SWS, 4 ECTS, Martin Faust, Rainer Malaka

  A detailed look behind technologies of digital media: from algorithms and math to implementation questions. The lecture in SS'08 will focus on graphic filters and effects of GIMP/ Photoshop, real-time applications on multiple CPU's (e.g. on PS 3) and other topics.
- *BlendaX Student Project*
  VAK: 03-05-H-902.61, 4 SWS, Rainer Malaka, Martin Faust, and Marc Herrlich

WS 2007/2008

- *Audio Programming*
  Master Digial Media, English, VAK: 03-05-H-804.5s, 2+2 SWS, 6 ECTS, Martin Faust

  This course introduces low level audio programming as well as applications in different domains (games, performances, electronic music). The aim is to understand the basic of audio programming of e_ects, _t, and compression. From an application point of view the course will have a closer look at applications of audio programming (e.g. algorithmic sound generation, adaptive music).
- *Embodied Interaction*
  Master Digial Media, English, VAK: 03-05-H-804.5r, 2+2 SWS, 6 ECTS, Rainer Malaka, Robert Porzel, and Martin Faust

  Embodied interaction takes the user and the computer system within their context and physical

environment into account. Applications are used in complex real-world settings and their meaning (for the user) will evolve in the course of action.

- *BlendaX Student Project*
  VAK: 03-05-H-902.61, 4 SWS, Rainer Malaka, Martin Faust, and Marc Herrlich

WS 2006/2007

- *Multiplayer Game Design and Algorithms*
  VAK: 03-05-H-804.5o, 2+2 SWS, 6 ECTS, Martin Faust and Daniel Cermak-Sassenrath

  The lecture introduced Networked and Multiplayer Games. From Split-Screen to Massively Multiplayer Games

WS 2005/2006

- *Games in Caves*
  VAK: 03-804.50/1, 2+2 SWS, 6 ECTS, Martin Faust and Daniel Cermak-Sassenrath

  We used my Doom3Arena DOOM 3 Modifcation to create games in a CAVE environment

WS 2004/2005

- *Action Beyond the Screen*
  VAK: 03-804.51, 2+2 SWS, 6 ECTS, Martin Faust and Daniel Cermak-Sassenrath

  Interaction beyond mouse, keyboard, and joystick. The students were required to build hardware devices that fit their games.

WS 2004/2005

- Computer Games: Fascination and Technique
  VAK: 03-804.22, 2+2 SWS, 0 ECTS, Martin Faust and Daniel Cermak-Sassenrath

  Hacking old school games.

Publications

Faust, M. (2014). Lesbare Dokumentationen mit XSD. Erstellung, Validierung, Dokumentation. Java Magazin, 6.14 (Article).

Faust, M. (2008). Enhanced Color To Gray Conversion. Journal of Graphic Tools (JGT), 13(2). (Article).

Faust, M. (2007b). Simple Ontology Support for C#. Extending the class hierarchy with semantic information. The Code Project. (Article, Online).

Faust, M. (2007a). Feedback in Pervasive Games. In Magerkurth, C. and R¨ocker, C., editors, Pervasive Gaming Applications - A Reader for Pervasive Gaming Research, volume 2. Shaker Verlag. (Book).

Faust, M. and Yoo, Y.-H. (2006). Haptic Feedback in Pervasive Games. In 3rd International Workshop on Pervasive Gaming Applications (PerGames), Dublin, Ireland. (Conference).

Faust, M. and Cermak-Sassenrath, D. (2006a). Airkanoid. one night in asia, Bremen, Germany. (Exhibition).

Faust, M. and Cermak-Sassenrath, D. (2006b). Airkanoid. Opening of ComputerArt 2.006 Exhibition, Gladbeck, Germany. (Ausstellung).

Faust, M. (2006). Computerspiele - Von der Skizze zum Spiel. Presentation Stadtbibliothek Bremen, Germany. (Talk).

Faust, M. and Müller, D. (2006). Low cost entry into education for ubiquitious automation. In 9th IFAC Symposium on Automated Systems Based on Human Skill And Knowledge, Nancy, France. (Conference).

Cermak-Sassenrath, D., Faust, M., and Rosch, H. (2005). AirKanoid - Visual Presentation vs. Physical Proximity in Mixed Reality Entertainment Applications. In 2nd International Workshop on Pervasive Gaming Applications (PerGames), Munich, Germany. (Conference).

Faust, M. and Cermak-Sassenrath, D. (2005). Airkanoid. Animotion Festival, Bremen, Germany. (Exhibition).

Faust, M. and Robben, B. (2005). Sound-Ästhetik von Eingabegeräten - Klangdimensionen. In HyperKult 14 - AudioKult und Hypersound? Aesthetics and culture of digital audio media, Lüneburg, Germany. (Conference).

Bruns, F. W., Erbe, H.-H., and Faust, M. (2005). Engineering Future Laboratories. In Müller, D., editor, impuls: MARVEL Mechatronics Training in Real and Virtual Environments, Vol. 18, pages 83-91. (Conference).

Bruns, F. W., Faust, M., and Robben, B. (2004). Human-Machine Systems and Performing Art. In Proceedings of 9th IFAC Symposium on Analysis, Design, and Evaluation of Human-Machine Systems, Atlanta, USA. (Conference).

Faust, M. and Cermak-Sassenrath, D. (2004a). Neue Schnittstellen für Spiele. Gesellschaft für Informatik Bremen, Germany. (Conference).

Courtiat, J. P., Davarakis, C., Faust, M., Grund, S., Kaufmann, H., Mwanza, D., and Totter, A. (2004). Evaluating Lab@Future, a collaborative e-learning laboratory experiments platform. In Proceedings of EDEN 2004 Annual Conference, pages 440-445, Budapest, Hungary. European Distance and E-Learning Network (EDEN). (Conference).

Baudin, V., Faust, M., Kaufmann, H., Litsa, V., Mwanza, D., Pierre, A., and Totter, A. (2004). Lab@Future - Moving Towards the Future of E-Learning. In Courtiat, J. P., Davarakis, C., and Villemur, T., editors, Proceedings of Technology Enhanced Learning Workshop at IFIP World Computer Congress, pages 3-18, Toulouse, France. Springer, Boston. (Conference).

Faust, M. and Cermak-Sassenrath, D. (2004b). Olympic Run. In Proceedings of GI Workshop 'Methoden und Werkzeuge zukünftiger Computerspiele', Ulm, Germany. (Conference).

Faust, M. and Bruns, F. W. (2003). Mixed Reality Web Service: Air through the Internet. In Proceedings of Technology Enhanced Learning, Milan, Italy. (Conference).

Rosch, H. and Faust, M. (2002). 3D User Interfaces und Ergonomie - Ein Gegensatz? Workshop at Mensch und Computer, Hamburg, Germany. (Workshop).

Faust, M. (2002). Graph Computing Environment. In Proceedings of Applied Graph Transformation (ETAPS), Grenoble, France. (Conference).

Faust, M. (1997). Virtual Reality Träume mit OpenGL. Linux-Magazin, (12):11-17. (Magazine).

Certificates

Universität Bremen

Fachbereich 3
Mathematik und Informatik

Promotionsurkunde

Die Universität Bremen verleiht durch den Fachbereich 3 – Mathematik und Informatik –

Herrn Martin Faust

geboren am 26. Juni 1973 in Bremen

den Grad eines

Doktors der Ingenieurwissenschaften (Dr.-Ing.)

aufgrund des Kolloquiums am 22. Januar 2008 und der Dissertation mit dem Titel:

Multi-Perspektivität in Modellierung und Simulation

Die Promotionsleistung wurde mit dem Prädikat „**magna cum laude**" bewertet.

Bremen, den 7. Februar 2008

(Siegel)

Der Rektor

Prof. Dr. Wilfried Müller

Der Dekan

Prof. Christian Freksa, Ph.D.

Fachbereich Mathematik und Informatik

Universität Bremen

DIPLOM–ZEUGNIS
Im Studiengang Informatik

Herr Martin Faust

geboren am 26. Juni 1973 in Bremen

hat das Diplom im ordnungsgemäßen Verfahren erlangt, dabei erfolgreich im Projekt
RUMpv Rechnergestützte Übergänge zwischen Modellen physischer und virtueller Realität

mitgearbeitet, eine Diplomarbeit zum Thema
GRACEland
Ein 3D-Editor und Interpreter für die graph- und regelbasierte Sprache GRACE
verfaßt und folgende Prüfungsleistungen erbracht:

Diplomarbeit	"sehr gut"
Studienbegleitende Leistungsnachweise	
Theoretische Informatik	"gut"
Praktische Informatik I	"sehr gut"
Praktische Informatik II	"gut"
Angewandte Informatik	"sehr gut"
Fachprüfungen	
Theoretische Informatik	"sehr gut"
Praktische Informatik I	"sehr gut"
Praktische Informatik II	"sehr gut"
Angewandte Informatik	"gut"
Projekt	"sehr gut"

Gesamtnote: "sehr gut"

Bremen, den 9. September 1998

(Siegel)

Die stv. Vorsitzende des Diplomprüfungsausschusses

Prof. Dr.-Ing. Ute Bormann

Die Prüfung wurde abgelegt nach der Diplomprüfungsordnung Informatik der Universität Bremen vom 22.12.1993

BTC AG

„Software Architecture is about the important things"
Martin Fowler

verleiht das

Abschlusszertifikat

für

Martin Faust

für

Teilnahme am *Softwarearchitektur Intensiv-Workshop*, 15.11.-17.11.2011, Oldenburg

17. November 2011

Prof. Dr. Michael Stal, 17.11.2011

BTC

Teilnahmebescheinigung

Hiermit bestätigen wir die Teilnahme von

Dr. Martin Faust

an folgendem Seminar:

Führen ohne Disziplinarfunktion

Zeitraum	26. November 2012 und 27. November 2012
Umfang	2 Tage
Inhalte	• Aufgaben, Herausforderungen und Chancen der eigenen Leitungsrolle • Angemessene Abgrenzung zu Kollegen und stimmige Positionierung • Wirkungsvolle Führungsinstrumente kennen und anwenden lernen • Gespräche mit Mitarbeiter und Team vorbereiten und durchführen • Feedback geben und nehmen • Konflikte erkennen und bearbeiten, mit Widerständen umgehen • Typische Fehler, Do's und Don'ts.

Oldenburg, 13. Dezember 2012
BTC Business Technology Consulting AG

ppa. Rüdiger Theobald
Leiter Führungskräfte- & Mitarbeiterentwicklung

i. A. Corinna Hoffmann
Führungskräfte- & Mitarbeiterentwicklung