

Dr. Christian Menkens

Dipl.-Ing.(FH), M.Sc. (GaTech), M.Sc. (TUM)

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Permanent Resident in Canada

Core Competencies

I am a Solution Architect and Software Development & Delivery Manager in the field of Web, Mobile, Information & Communication Technologies (ICT) and Enterprise Software Systems with an agile software project management, interdisciplinary technology management and innovation consulting background.

I have four years of IT & ICT innovation consulting and agile software project management experience. I have more than six years of software engineering and software architecture/integration experience with focus on mobile, web and IP telecommunication systems. I worked on, and later managed, several projects that combined emerging technologies and technological trends with business modeling/cases and societal/legal/policy aspects in interdisciplinary teams.

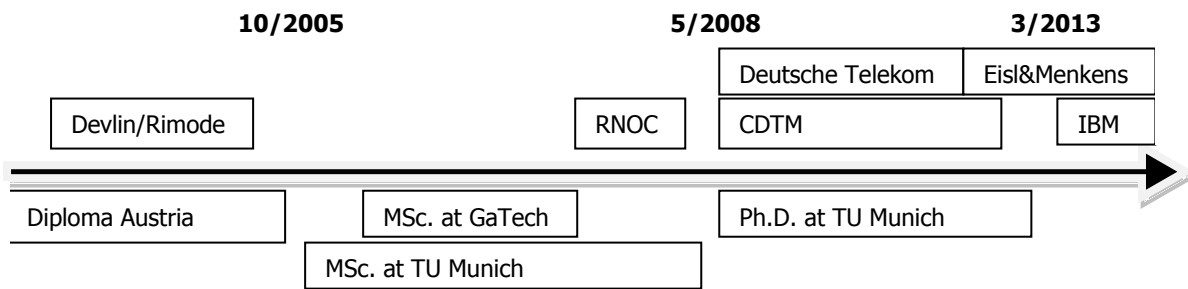
I successfully secured international industry partners like Deutsche Telekom, Siemens and Telefonica for projects and long-term R&D cooperations, and regularly negotiated budgets and project scopes with their management executives. Through my academic education, Ph.D. research and work I have become a highly motivated self-starter. I have shown that I am able to solve complex problems through analytical research and that I can learn emerging concepts, methodologies and technologies fast. In projects, I have proven that I manage my time between concurrent assignments well, that I perform great in interdisciplinary teams and that I can independently complete tasks with the highest attention to detail.

I hold a Master of Science double-degree as well as an applied Software Engineering & Telecommunications Dr.rer.nat. (equivalent to Ph.D.) degree.

Qualification Highlights and Summary

- 4 years of experience in managing and delivering interdisciplinary and agile enterprise client, R&D, innovation consulting and product prototyping projects across industries in the web, mobile and information & communication technologies domain.
- 6 years of experience in software architectures/integration and software engineering of business-information, web, mobile and telecommunication software systems using Java Enterprise and Microsoft .Net technologies.
- Excellent information technology and computer science education with extended expertise in NG(M)N Telecommunication Core Software/Systems Architectures and the Telecommunications industry.
- Excellent communication skills as proven by successful project/budget negotiations with various levels of management at Deutsche Telekom Laboratories, BMW, Siemens and Telefonica O2 Germany.
- Excellent multi-tasking, time management and prioritization skills enabling the ability to concurrently manage several deadline-driven projects and tasks. Proven by successfully leading CDTM projects, completing a long-term Ph.D. research project and founding/growing the "Eisl Menkens GesBR" business in parallel.
- Excellent team player with the ability to guide people/teams as proven by co-managing the CDTM, managing R&D project teams and supervising bachelor/master theses.
- Excellent ability to solve complex problems, to conduct thorough analytical research, to learn fast and to pay highest attention to detail as proven by excellent and highly distinctive Ph.D. R&D results.
- Excellent writing, presentation and teaching skills as proven by Master of Science and Ph.D. theses, conference/workshop/project presentations and taught courses.

Overview Timeline



Professional Experience

03/2013 – now

IBM Global Business Services in Toronto, Canada
(www.ibm.ca)

Solution Architect, Innovation Consultant and Development & Delivery Manager in Application Innovation Services and MobileFirst Practice

Technical Project Delivery, Development Management, Software/Solution Architecture, Software Engineering, R&D and Innovation Consulting for medium to large enterprise clients across Airline, Insurance, Banking and Telecommunications industries. Projects with a strong focus on mobile strategy, agile product implementation, integration with existing enterprise software systems and extension of existing systems.

5/2009 – 8/2012

Center for Digital Technology and Management (CDTM) in Munich, Germany
(www.cdtm.de) (www.tum.de)

Agile Software Project Manager, Lead Software Architect, Strategy and Business Development

Led the 3-year and EUR 500k R&D and innovation cooperation between **Deutsche Telekom Laboratories (T-Labs)** and the CDTM. I worked directly with **Senior VP Dr. Heinrich Arnold** and his project field managers.

- *Defined and managed ten 3-6 month and 3-25 person Scrum **software innovation and product prototyping projects** with focus on Telecommunications, Software Engineering/Architectures, Mobile Computing and Web/Internet.*
- *Defined, managed and published three thorough (300+ pages) technology **trend research studies** around the future of Telecommunications, Web, Mobile and Renewable Energy/Smart Grid.*
- *Innovation cooperation was completed highly successful, and I **secured a 3-year and EUR 500K extension**. I negotiated project budgets and defined scope around the concepts of "Internet of Things" and "Internet of Services (Convergence)" with T-Labs management.*

Co-Managed Strategy and Business Development at the CDTM

- ***Secured Telefonica O2** as new long-term innovation cooperation partner. Negotiated budgets and scope around "Big Data" directly with **Managing Director Service Technology Dr. Eckart Pech** and his team.*
- *Secured, defined and successfully managed software innovation projects and trend research studies with **Siemens, BMW, Audi, Allianz, NTT Docomo, Nokia Siemens Networks, BCG, Infosys and the Federal Ministry of Economics and Technology**. Secured several follow-up projects with these partners.*

Headed the IT Administration and Transformation Office and led alternating 5-15 person project teams.

- *Led custom software development projects for essential CDTM process tools. Led VMWare virtualization migration/update, Novell Vibe rollout and accounts batch administration projects for an IT infrastructure serving 400+ researchers and students.*

Headed the International Office

- *Negotiated, defined and secured a new long-term exchange agreement with the Georgia Institute of Technology, USA, as well as the Waseda University in Tokyo, Japan.*
 - *Managed half-yearly bi-directional exchange with **UC Berkeley, Columbia University, Carnegie Mellon University, HEC Montreal, TELECOM ParisTech, Infosys, Vodafone** for 8-12 faculty, researchers or students.*
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6/2008 – 12/2011

Deutsche Telekom in Berlin, Germany
(www.laboratories.telekom.com)

External Software Architect/Engineer, Innovation and R&D Consultant

Software Architecture/Integration, Java Software Engineering, R&D and innovation consulting for **web/mobile location-based services, emerging telecommunication presence services/enabler, multimedia services and future real-time communication** projects.

Developing/transferring ideas and concepts, designing software architectures, providing technology expertise and software engineering in product development projects.

Software Architecture/Integration, Java Software Engineering and R&D in the field of **emerging IP telecommunication technologies** that will enable a composition/orchestration of web/internet and IP telecommunication systems, service and applications in the near future (**Web-Telecom-Convergence**).

Work included software architecture and engineering for **Next Generation Networks (NGN)**, telecommunication **Core/Enabler** concepts, future **SOA-based middleware software architectures, Cross-Platform** mobile/web application technologies, **IP Multimedia Subsystem (IMS), Long Term Evolution (LTE), Evolved Packet Core (EPC)** work and related.

5/2008 – 5/2009

Center for Digital Technology and Management (CDTM) in Munich, Germany
(www.cdtm.de) (www.tum.de)

Software Engineer/Architect

Worked in different 3-8 person agile Java Enterprise (J2EE) software development teams on several web/internet and IP-based telecommunication services and applications.

Examples are a Social Notification App (SNAApp), an Automated Conference Call service, a mobile wheelchair navigation system or a Web-Telecom Convergence SOA Middleware Platform.

1/2012 – now

Eisl und Menkens GesBR in St.Wolfgang, Austria
(www.eislmenkens.at)

Co-Founder and Lead Technical Architect

Built and grew the Web, Content Management Systems (CMS), eCommerce Shops, E-Mail and Database customization, deployment and hosting business to currently serving around one hundred small to medium size clients.

Built and grew the web portals www.stwolfgang.at and www.wolfgangsee.eu to regional tourism marketing platforms that are currently serving one hundred hotels, restaurants and local businesses.

Leading the technology and software architecture domains for custom web/software development projects as well as for the maintenance/expansion of the companies IT infrastructure.

05/2007 – 10/2007

Georgia Institute of Technology
Research Networks Operations Center (RNOC) in Atlanta, USA
(www.rnoc.gatech.edu)

Software Architect/Engineer

Worked in the agile Java Enterprise (J2EE) software development team that designed and implemented the "IMS Social Community Network Application". It provided a mobile social community for faculty, researchers and students that utilized emerging IP-based Telecommunication as well as real-time audio and video streaming capabilities and features.

9/2004 – 6/2005

Devlin eBusiness Architects and Rimode Inc. in Toronto, Canada
(www.devlin.ca)

Web Applications and VoIP Developer

Developed and/or maintained the Microsoft .Net, Java and HTML projects www.mmm.ca, www.asthma.ca and www.virginmobile.ca, that were all successfully launched in 2005.

Designed and completed the "Telehomecare Applications Kiosk" J2EE and Cisco VoIP software engineering project.

Education, Research and Development

01/2009 – 11/2012

Technical University Munich, Germany
German Doctorate (Dr.rer.nat.) in Computer Science
at Software and Systems Engineering Chair of Prof. Dr. Dr. h.c. Manfred Broy
(www.in.tum.de) (www4.in.tum.de) (www.christianmenkens.at/research)

Applied R&D thesis project:

- *"From Service Delivery to Web-Telecom Converged Application Delivery in the Telecommunication Industry" in cooperation with Deutsche Telekom Laboratories and Georgia Institute of Technology.*
- *Specialized in Software Engineering, SOA Software Architectures and System Architectures for Web and Telecom converged Services and Applications.*

Defined and supervised 20+ master's and bachelor's thesis. *All were successfully completed in time and with highest quality. Selected were published at international conferences.*

Taught CDTM Technology Management study program "Trend & Futures Research Seminar" and "Basics of IT" courses

Published 15+ research reports, scientific conference papers, journal papers and books, from which *several were presented at international conferences, workshops and symposia in Berlin, Miami, Las Vegas and Cardiff.*

Graduation with Magna Cum Laude: November 14th, 2012
(www.christianmenkens.at/PhD_Menkens.pdf)

8/2006 – 5/2007

Georgia Institute of Technology in Atlanta, USA
Master of Science Degree in Computer Science and Telecommunications
(www.gatech.edu)

Basics of Computer Graphics, Real-Time Systems and Artificial Intelligence. Specialized in Software Engineering/Architectures for Next Generation Networks (NGN), Telecommunications, IP Multimedia Subsystem (IMS) and related technologies and systems.

Master of Science project *"Analysis of SigComp Compression of IMS Components over the Air Interface"*

Graduation with high distinction on May, 5th 2007.

10/2005 – 01/2008

Technical University Munich, Germany

Master of Science Degree in Informatics, with Minor in Business Administration
(www.in.tum.de)

Specialized in Software Engineering, design and architectures of Business Information Systems, Databases, Distributed Systems and Networks.

Master of Science thesis project "*IP Multimedia Subsystem (IMS) Social Community Network (SoCoNet)*"

Graduation with high distinction on Jan., 11th 2008.
(www.christianmenkens.at/DA2_Menkens.pdf)

10/2001 – 10/2005

Upper Austria University of Applied Sciences in Hagenberg, Austria

Diploma (Dipl.-Ing.(FH)) in Software Engineering, with Minor in Business Administration
(www.fh-hagenberg.at)

Specialized in Software Engineering, Networks and Distributed Systems, Data/Web Engineering and Project Engineering.

Diploma thesis "*Telehomecare Applications Kiosk*" in cooperation with Rimode Inc. and Cisco Systems Canada

Graduation with high distinction in October 2005.
(www.christianmenkens.at/DA1_Menkens.pdf)

Project Management and Technology Skills and Experience

Project Management	3 years of Technical Project Delivery 3 years Requirements Engineering 4 years Agile Scrum R&D and Innovation Software Project Management Software Development Life Cycle (SDLC)
Software Engineering	2 years Software Architecture 1 year Service Oriented Architectures (SOA) 1 year Enterprise Architectures (EA) 2 years Component Oriented (e.g. Enterprise Java Beans (EJB), COM, CORBA) 3 years Object Oriented (OO) Design (e.g. Design Patterns) 1 year Unified Modeling Language (UML) 1 year Entity Relationship (ER) Models
Software Development	1 year C/C++ Standard Template Library (STL) 4 years Java J2SE, J2EE, J2ME, RMI, Sockets, Unit Tests (JUnit), JBoss, Tomcat, Spring, XML 1 year Microsoft .Net C#, ASP 1 year PHP, CSS, HTML, XHTML 1 year Database SQL, PL/SQL, MySQL
Telecommunications	Session Initiation Protocol (SIP) Servlets, IP Multimedia Subsystem (IMS) OpenIMSCore, Evolved Packet Core (EPC), Streaming Technologies, Voice over IP, Sailfin, Ubiquity Service Delivery Platform (SDP), Java API for Intelligent Networks (JAIN), Service Level Execution Environment (SLEE)
Web and Internet	Web (Apache HTTP), E-Mail (SMTP, IMAP, POP), DNS, DHCP, TCP/IP, Computer Network Management and Administration
Operating Systems, Office, Design and Graphics	2 years Debian Linux 2 years Microsoft Windows Server Administration 15 years Microsoft Windows Desktop Administration Microsoft Office Suite, Adobe Photoshop, Adobe Dreamweaver, Adobe Flash

Awards and Scholarships

- 4/2007 **Georgia Tech Grand Prize and Campus Category Winner**
AT&T, Nokia Siemens Networks and Georgia Tech Next Generation Networks and
Convergence Research and Development Competition
(www.cic.gatech.edu)
- 7/2006 **Fulbright Scholar**
Full support for Master of Science degree program at the Georgia Institute of
Technology
- 5/2006 **Tech2B Award Austria**
for excellent, business relevant diploma thesis

Invited Talks

- Christian Menkens
Renewable Energy, Smart Grid, Smart Home, Smart Office Software Applications and Platforms
(www.youtube.com/watch?v=d0RODoS2S6k)
World's biggest Technology Event/Festival, Telefonica Campus Party, Berlin, 2012
- Christian Menkens
Towards a SOA-based Telecommunication Application Delivery Platform
Communications and Distributed Systems Workgroup, O2 Germany, Munich, 2010

Publications

- Christian Menkens
Web-Telecom Converged Application Delivery: From Service Delivery to a SOA-based Middleware for Web-Telecom Converged Applications in the Telecommunication Industry
Südwestdeutscher Verlag für Hochschulschriften (Dec 2012) - ISBN: 978-3838136004
Book
- Christian Menkens, Michael Würtinger
From Service Delivery to integrated SOA based Application Delivery in the Telecommunication Industry
Journal of Internet Services and Applications
Springer 2011, DOI: 10.1007/s13174-011-0028-9
Journal Paper
- Benedikt Römer, Christian Menkens, Julian Sußmann, Nikolaus Konrad (eds.)
Smart Grid Infrastructures
CDTM, München, 2011 - ISBN: 978-3-9812203-7-7
Book
- Christian Menkens, Julian Sussmann, Miriam Al-Ali, Emanuel Breitsameter, Jelena Frtunik, Tobias Nendel, Tobias Schneiderbauer
EasyWheel - A Mobile Social Navigation and Support System for Wheelchair Users
8th International Conference on Information Technology : New Generations - ITNG 2011
Conference Paper
- Marie-Luise Lorenz, Christian Menkens, Julian Sußmann, Nikolaus Konrad (eds.)
Developer Platforms and Communities in the Telecom Industry
CDTM, München, 2010 - ISBN: 978-3-9812203-6-0
Book
- Christian Menkens
From Service Delivery to Application Delivery in Telecommunications
IEEE Global Communications Conference (IEEE GlobeCom 2010) - Workshop on Enabling the Future Service-Oriented Internet: Towards Socially-Aware Networks
Workshop Paper

Mark Bilandzic, Christian Menkens, Julian Sussmann, Daniel Kleine-Albers, Eva Bittner, Armand Golpaygani, Bernhard Mehl, Jonas Huckestein, Othman Khelil

SociCare: Towards a Ubiquitous Context Aware Mobile Community Emergency System

International Workshop on Mobile and Location-based Business Applications (MAPPS) at Mobilware 2010
Workshop Paper

Christian Menkens, Werner Kurschl

VoIP based Telehomecare Application Kiosk

7th International Conference on Information Technology : New Generations - ITNG 2010
Conference Paper

Marie-Luise Lorenz, Christian Menkens, Nikolaus Konrad (eds.)

E-Energy

CDTM, München, 2009 - ISBN: 978-3-9812203-5-3
Book

Christian Menkens

Tele Home Care Application Platform: Overcoming drawbacks of existing Tele Home Care solutions by designing and implementing a Cisco VoIP Communications based Application Platform

VDM Verlag Dr. Müller (October 2009) - ISBN: 978-3639206760
Book

Christian Menkens

Towards a Context Aware Mobile Community Application Platform

6th International Conference on Information Technology : New Generations - ITNG 2009
Conference Paper

Christian Menkens

Social Community Network Application with IP Multimedia Subsystem (IMS): Design, Architecture and Implementation of an IP Multimedia Subsystem (IMS) Specification Compliant Social Community Application

VDM Verlag Dr. Müller (Juni 2008) - ISBN: 978-3639037906
Book

Christian Menkens, Nils Kjellin, Anders Davoust

IMS Social Network Application with J2ME compatible Push-To-Talk Service

International Conference and Exhibition on Next Generation Mobile Applications, Services and Technologies (NGMAST) 2007
Conference Paper

References

Dr. Eckart Pech, Managing Director Service Technology, Telefónica Germany GmbH & Co. OHG, Georg-Brauchle-Ring 23-25, 80992 Munich, Germany, Mail: eckart.pech@telefonica.com

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Dipl.-Ing. Dr. Heinz Dobler – software development professor at the Upper Austria University of Applied Sciences, www.fh-hagenberg.at

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