Curriculum Vitae
Dr.-Ing. habil. Udo Bub

PERSONAL INFORMATION

Name	Udo Bub
Address	Knesebeckstr. 88, 10623 Berlin and 1077 Budapest, Király utca 75
	Email: udo.bub@t-online.de, Mobile: +49-160-8841954
Date of Birth	July 22, 1969 in Uccle-Brussels/Belgium
Citizenship	German
Linkedin	*https://de.linkedin.com/in/udo-bub-905a9a23*

EDUCATION

Habilitation	2015 – 2017, Eötvös Loránd University (ELTE) Budapest, Faculty of Informatics (Computer Science). Title: "A Design Science Approach to the Engineering of Innovation in Software-Intensive Systems". Graduation Oct 2017: Dr. habil. in the branch of "Informatics Science"
Business School Executive Education	Harvard University (2005/2010), Business School, Executive Education: "Delivering Information Services" / "Changing the Game: Negotiation and Competitive Decision Making".
	London Business School (2008), Executive Education: "General Management".
	Stanford University (2007), Graduate School of Business, Executive Education: "Strategic Uses of Information Technology".
Dissertation	Jan 1995 – Jul 1998, Technical University of Munich, Faculty of Electrical and Computer Engineering, Chair of Human-Machine-Communication, Prof. M. Lang, Title: "Anwendungsspezifische Online-Adaption von Hidden-Markov-Modellen in automatischen Spracherkennungssystemen". Graduation Jan 1999: Dr.-Ing. (recognized as PhD in Computer Science by ELTE 2016)
Awards	Dec 1998 Medal Award by Stiftung Werner-von-Siemens-Ring for excellent research with practical application
Academic Studies	Nov 1989 – Aug 1994, Technical University of Munich, Faculty of Electrical and Computer Engineering. Graduation Aug 1994: Dipl.-Ing. (recognized as M.Sc. in Computer Science by ELTE 2016)
Stipend	Prof. Dr.-Ing. Erich Müller Stiftung, Stifterverband für die Deutsche Wissenschaft

GRAMMAR SCHOOL AND MANDATORY MILITARY SERVICE

Jul 1988 – Sep 1989	German Air Force, Air Traffic Reconnaissance in Freising/Upper Bavaria,
Sep 1979 – Jun 1988	Secondary School (Gymnasium) in Munich; Jun 88 Abitur (A-Level)
Sep 1975 – Aug 1979	Primary School (Grundschule) in Munich

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WORK EXPERIENCE

Foreseen starting Feb 2018	**Eötvös Loránd University (ELTE), Faculty of Informatics, Budapest.** *Associate Professor (tenured)*

Innovation and Software Systems Engineering.

Teaching: Innovation Engineering, Software Systems Engineering. Integrating core computer science with innovation, entrepreneurship, and leadership.

Sep 2016 – date	**Eötvös Loránd University (ELTE), Faculty of Informatics, Budapest.** *Adjunct Professor (part time)*

Information Systems Engineering, Software & Service Architecture, Innovation Engineering.

Teaching: Business Development Lab (for Software and Service Architects) within the EIT Digital Master School. Student grading second highest of 17 participating universities.

Video at DLD Berlin 2017 with interview panel session "Education of the Future" http://dld-conference.com/users/udo-bub about my educational core beliefs.

Jan 2012 – date	**EIT ICT Labs Germany GmbH / EIT Digital Germany, Berlin** *CEO / Director Germany*

Founding CEO of EIT ICT Labs Germany GmbH, Co-Founder EIT Digital.

Open Innovation Management and Consulting, Entrepreneurial Education, Start-Up Incubation, Scale-Up Acceleration

Accomplishments (examples):

Co-initiated and running Digital Knowledge and Innovation Community of the **European Institute of Innovation and Technology (EIT Digital)** with Core Partners Deutsche Telekom AG, SAP AG, Siemens AG, Nokia, Orange/France Télécom, Alcatel-Lucent, Philips, Ericsson.

Established high profile IT leadership and entrepreneurship program "Software Campus" with 10 partners from industry and 11 leading universities and research institutes (*http://www.softwarecampus.de*).

Created Europe's biggest annual IT startup contest "Idea Challenge" (*http://ideachallenge.eitictlabs.eu*).

May 2004 – Dec 2011	**Deutsche Telekom Laboratories (T-Labs), Berlin** *Vice President Innovation Development (Lab1), Member of Management Board, (Senior Executive Deutsche Telekom, Management Group 2 (Hay Grading))*

Founding member of executive team at Deutsche Telekom Laboratories as corporate innovation- and R&D-Unit. Responsible for innovation in Voice and Data Services, ICT

Infrastructure and ICT Architecture, Security.

Relaunched Corporate Innovation and R&D for Deutsche Telekom starting with 20 employees and brought to a level of 350 employees and a yearly budget of 40 Million € Designed and implemented project portfolio that was independently evaluated to be worth a turnover or savings of 600 Million €(cumulated over five years).

Launched satellite innovation centers in Israel (Beer Sheva) and Silicon Valley (Los Altos, CA).

Own responsibility of 80 employees and a yearly budget of 20 Million € following project areas: Voice and Multimodal Systems, Enterprise and Software Architecture, Application and Network Security, Techno-economics. Application Areas: Core Telco, IT Services, Health, Energy.

May 2007 – Dec 2011	**European Center for Information and Communication Technologies (EICT) GmbH, Berlin.** *CEO (Part Time)*

General Management; **R&D Management and Innovation Management** (in part time; synergetic with tasks at Deutsche Telekom Laboratories)

Shareholders: Daimler AG, Deutsche Telekom AG, Fraunhofer Society, Opera Software AB, Technical University of Berlin.

Started with turnaround management (strategy, financials) in 2007. Five times growth of turnover to volume of 2.5 Million €(2007 to 2011).

Apr 2001 – Apr 2004	**Diebold Management Consulting** (merged into Detecon International in Aug 02)**, Munich** *Managing Consultant*

Management and Technology Consulting for CIO and CTO of multinational companies (MNC), as well as Start Ups. International assignments.

IT-Strategy, Technology- und Platform Strategy, Enterprise Architecture, Service Delivery Platforms. Large scale project management for IT-Development- and IT-Outsourcing. End-to-End management of full IT landscape of telecommunication operators, i.e. Business Support Systems (BSS): Enterprise Resource Planning, Customer Relationship Management, Order Management, Enterprise Application Integration, Billing. Operations Support Systems (OSS).

Aug 1998 – Mar 2001	**Debis Systemhaus, Munich** *Consultant and Project Manager*

Analysis and Design for IT-Development in Telecommunications, **IT-Projektmanagement**.

End-to-End Product Launch Management (Broadband Data, Mobile Business) for Viag Interkom (now Telefónica/O$_2$).

Management of projects in the field of Enterprise Architecture Management (EAM), Enterprise Application Integration (EAI), Customer Relationship Management (CRM), Business Support Systems (BSS), Operations Support Systems (OSS), Network Planning, Data Warehouse.

Jan 1995 – **Jul 1998**	**Siemens AG, CT IC 5, Munich** *Research Engineer*

R&D in the area of Human Computer Interaction. Speech technology for use over telephone lines.

Feb 1995 – **Jul 1996**	**Innovation Institute for Applied Software Technology (FAST) e. V., Munich** *Assistant to Board Member*

Preparation of analyses and presentations. Method design for Software Engineering (Object Orientation, Requirements Analysis, Launch of CASE-Tool deployment, R&D-Management).

Sep 1993 – **Dec 1994**	**Carnegie Mellon University, Pittsburgh PA / USA** *Visiting Scientist*

Research at School of Computer Science, Center for Machine Translation.

Developed one of the first integrated multimodal interfaces combining automatic speech recognition and computer vision for lip-reading using novel tracking technologies for free moving users.

Oct 1989 – **Nov 1992**	**Student Internships**

Siemens AG (Munich), Rohde & Schwarz (Munich), Chair for electronic design automation (TU Munich), Electricité de France – EdF (Paris / France).

EDITORIAL BOARDS, OTHER SIGNIFICANT MEMBERSHIPS

Editor for Scientific Journal *Business & Information Systems Engineering*, Department *Information Systems Engineering*. Springer.

Editor for Scientific Journal *WIRTSCHAFTSINFORMATIK* (national edition of Business & Information Systems Engineering), Department *Information Systems Engineering*, Springer.

Among others, scientific lead editor for focus issue 5/2011, „The Future of Telecommunications", respectively „Die Zukunft der Telekommunikation" (Bub U., Krcmar H., Picot A.)

Advisory Board for Journal *Wirtschaftsinformatik & Management*, Gabler.

Member Münchner Kreis e.V. (supranational think tank http://www.muenchner-kreis.de),

Editor of Zukunftsstudie (Future Study), (Picot A., Eberspächer J., Schläffer C., Wieland R., Bub U.) for the IT-Summit of the German Government 2008 until 2011.

Yearly invitation and participation at the *IT-summit of the German government* (including federal

chancellor A. Merkel and 5 ministers) since 2008.

Yearly invitation and participation of international think tank conferences like *DLD* (Digital Life Design), *Kinneret*, and many more.

Member of Steering Board of *Software Campus*, the lighthouse project of the German government for the qualification of excellent scientists as future IT leaders 2011 – date (http://www.softwarecampus.de).

Consortium Leader and member of the Steering Board of Smart Senior, the lighthouse project of the German government for IT services for the elderly, 2008 – 2011 (http://www.smart-senior.de).

Membership of curatory board of the *Leibniz Center for Informatics at Schloss Dagstuhl* (*Leibniz-Zentrum für Informatik Schloss Dagstuhl*), Wadern.

Membership Board of Trustees *T-Labs at Ben-Gurion University*, Beer-Sheva, Israel, 2006 until 2011.

Membership Advisory Board Universität St. Gallen (HSG), *Competence Center Integration Factory* 2007 until 2011.

Membership *Gesellschaft für Informatik* (GI) e.V. (*German Computer Science Society*)

MEMBERHSIPS IN SCIENTIFIC ORGANIZING COMMITTES (OS), PROGRAM COMMITTEES (PC), REVIEWER POSITIONS

Reviewer *Journal Universal Access in the Information Society* (Springer).

Reviewer *Journal Business & Information Systems Engineering, WIRTSCHAFTSINFORMATIK* (Springer).

Reviewer *Wiener Wissenschafts-, Forschungs- und Technologiefonds (WWTF)*.

PC *ACM Intern. Conf. on Design Science Research in Information Systems and Technology (DESRIST)*, St. Gallen 2010; Milwaukee, WI 2011; Karlsruhe 2017.

PC *Intern. Conf. on Intelligence in Networks (ICIN)*, Bordeaux 2009; Berlin 2010; Berlin 2011.

PC *GI Fachtagung Kommunikation in Verteilten Systemen (KiVS)*, Workshop „Setup and Operation of Open NGN Testbed Infrastructures", Kassel, 2009.

PC *Intern. Conf. on Service-Oriented Computing (ICSOC)*, Workshop Business Oriented Aspects concerning Semantics and Methodologies in Service-Oriented Computing – SeMSoC, Chicago IL, 2006; Wien, 2007;

PC Workshop *Trends in Enterprise Architecture Research (TEAR)*, Sydney 2008, Stockholm 2009, Helsinki 2011.

OC, PC *IEEE/ACM Intern. Conf. on Software Engineering, Track Telecommunication Experience (ICSE)*, Leipzig, 2008.

PC *DW, Track Komponenten- und Serviceorientierung*, St. Gallen, 2008.

PC *ISCA Interspeech,* Pittsburgh PA, 2006; Antwerpen, 2007; Brisbane, 2008; Brighton, 2009; Makuhari, 2010; Florenz, 2011; Portland OR, 2012.

PC *IEEE Intern. Conf. on Acoustics, Speech, and Signal Processing (ICASSP)* 2008, 2009, 2010, 2011, 2012.

PC *ACM/IFIP Intern. Middleware Conference, Workshop Middleware for Next-Generation Converged Networks and Application (MNCNA)*, Newport Beach CA, 2007.

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PC *SQM (Software Quality Management), Track Agile Software Development Process*, Köln, 2003.

OFFERED ACADEMIC EDUCATION, COURSE DESIGN IN HIGHER EDUCATION

Bub U.: Fall Semester 2017/18, ELTE Budapest, Faculty of Informatics, "Business Development Lab (for Software and Service Architects) 1, full lecture & practice, Master student's curriculum.

Bub U.: Spring Semester 2017, ELTE Budapest, Faculty of Informatics, "Business Development Lab (for Software and Service Architects) 2, full lecture & practice, Master student's curriculum.

Bub U.: Fall Semester 2016/17, ELTE Budapest, Faculty of Informatics "Business Develompment Lab (for Software and Service Architects) 1, full lecture & practice, Master student's curriculum.

Bub U.: Winter Semester 2010/11, TU Berlin, Faculty of Electrical Engineering and Computer Science, "ICT Systems Engineering in der Telekommunikation, full lecture, Master student's curriculum.

Bub U.: Winter Semester 2009/10, TU Berlin, Faculty of Electrical Engineering and Computer Science, "ICT Systems Engineering in der Telekommunikation, full lecture, Master student's curriculum.

Bub U.: Winter Semester 2008/09, TU Berlin, Faculty of Electrical Engineering and Computer Science, "ICT Systems Engineering in der Telekommunikation, full lecture, Master student's curriculum.

Bub U.: Winter Semester 2007/08, TU Berlin, Faculty of Electrical Engineering and Computer Science, "Systems Engineering in der Telekommunikation, full lecture, Master student's curriculum.

Bub U.: Winter Semester 2006/07, TU Berlin, Faculty of Electrical Engineering and Computer Science, "Technologien der nächsten Generation für die Telekommunikation", full lecture, Master student's curriculum.

Bub U.: Winter Semester 2005/06, TU Berlin, Faculty of Electrical Engineering and Computer Science, "Technologien der nächsten Generation für die Telekommunikation", full lecture, Master student's curriculum.

Bub U.: Winter Semester 2004/05, TU Berlin, Faculty of Electrical Engineering and Computer Science, "Technologien der nächsten Generation für die Telekommunikation", full lecture, Master student's curriculum.

Summer Semester 2011, Ecole Nationale des Ponts et Chaussées, "Open Innovation", guest lecture, MBA student's curriculum, 2011.

Software Campus

2012 – date: Software Campus, curriculum design and course presentations for future IT-leaders (PhD and Master students).

Phase 2 (2017 – 2022) Bub U.: Co-initiator, Co-designer and Leader of consortium of 9 universities (TU Munich, TU Berlin, TU Darmstadt, Karlsruhe Institute of Technology, Stuttgart University, TU Dresden, Paderborn University, Friedrich-Alexander-University Erlangen-Nürnberg, Ludwig-Maximilians-University Munich), 2 research institutes (Fraunhofer Gesellschaft, DFKI, Max-Planck-Institute for Informatics), and 10 industry partners (Georg von Holtzbrinck GmbH, Datev eG, Scheer GmbH, Software AG, Trumpf GmbH & Co. KG, Rohde & Schwarz GmbH & Co. KG, Huawei Technologies GmbH, Carl Zeiss AG, Merck KGaA, Media-Saturn GmbH).

Phase 1 (2012 – 2017) Bub U.: Co-initiator, Co-designer and Leader of consortium of 5 universities (TU Munich, TU Berlin, TU Darmstadt, Saarland University, Karlsruhe Institute of Technology), 3 research institutes (Fraunhofer Gesellschaft, DFKI, Max-Planck-Institute for Informatics), and 9 industry partners (Siemens AG, SAP AG, Robert Bosch GmbH, Deutsche Telekom AG, Deutsche Post

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DHL AG, Georg von Holtzbrinck GmbH, Datev eG, Scheer GmbH, Software AG.

Software Campus trains and professionally develops tomorrow's senior IT executives while opening up excellent career prospects to young IT experts in Germany. Software Campus combines scientific leading-edge research with hands-on management practice into an entirely new and innovative concept. The concept of Software Campus is an entirely new and innovative approach to combining scientific leading-edge research with hands-on management practice. Doctoral candidates generally complete the program over a period of one to two years. Masters students generally participate for the duration of one year. They are supported by a total of 19 partners from politics, the industry and research. [http://www.softwarecampus.de]

The concept of Software Campus is based on five closely interlinked pillars: IT Project, Executive Education Programs, Mentoring, Practical Experience, Network.

The Executive Education Program consists of following pyramid of five modules: Leadership Skills, Organizational Expertise, Methodology Expertise, Social and Personal Skills, Technical Skills. Rigorous selection of candidates based on academic excellence and assessment center decision based on leadership potential.

So far 217 active participants (admitted students including graduates in alumni organization).

Funding: 50% by German Federal Ministry of Education and Research, 50% by participating industry partners. The project is part of the yearly IT summit process of the German government including personal support of Federal Chancellor Dr. Angela Merkel and the Minister of Education and Research Prof. Johanna Wanka.

HEAD OF EDUCATION-RELATED UNIT

Director EIT Digital Germany (Node Director), Co-Founder of EIT ICT Labs (Leader of the German proposal contribution and operational participation, co-design of Knowledge Triangle: Education, Research, Innovation).

As member of the EIT Digital Management Committee co-supervising the creation and operations of the EIT Digital Master School, EIT Digital Doctoral School, and EIT Digital Professional School with 20 participating universities.

HEAD OF RESEARCH GROUPS (including PhDs, PhD candidates and MSc students)

Vice President Deutsche Telekom Laboratories (status as academic affiliate institute to TU Berlin)

Group "Voice and Multimodal Systems"

Group "Enterprise and Software Architecture" (Cloud Computing, Service Oriented Computing, Virtualization, Software Defined Networking, Technoeconomics)

Group "Application and Network Security"

Industrial research supervisor to PhD students (students embedded in research program based on my own initiation and industrial supervision, however not in a formal academic role):

Philipp Offermann (PhD graduation 2009, TU Berlin)
Oliver Holschke (PhD graduation 2011, TU Berlin),
Jannis Rake-Revelant (PhD graduation 2013, TU Berlin),

SIGNIFICANT CONTRIBUTIONS TO LARGE SCALE ARTIFACTS (selection, non-exhaustive)

Co-Founding of Deutsche Telekom Laboratories (T-Labs) as industrial R&D-organization as well as academic institute as (member of the executive team).

Responsible for ca. 50 R&D Large Scale Projects for software-intensive systems such as telecommunications and information systems.

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Concrete Artifacts with own significant contribution in the technical domain (initiation, significant contributions in requirements, design, development, dissemination):

Field "Enterprise and Software Architecture"

Project: Prosero/Service orchestration using SOA, system design with executable software.

Project: Server Virtualization, Cloud Services Acceleration, system design with executable software.

Project: Method Factory (SOA, Lifecycle Management, etc.), methods.

Field "Voice and Multimodal Systems"

Projects: Intelligent Customer Self Service, Project Customer Care Automation, Project Speech Based Classifier, system design with executable software.

Project: Multimod, Project Universal Telecommunications Interface, system design with executable software, patent.

Field "Application and Network Security"

Projects: NetShield and NetProtect, system design with executable software, patent.

LANGUAGES

German (native), English (fluent), French (fluent), Spanish (fluent), Hungarian (basic)

PRIVATE INTERESTS

High Seas Sailing (Sporthochseeschifferschein licence - SHS)

Aviation (Private Pilot Licence – PPL(A))

Further kinds of sports including football, snowboarding, stand up paddling, diving

Literature