Curriculum Vitae

Christian Gütl

Personal Data

- April 15th, 1966 born in Graz, Austria
- Austrian citizen

Education

2009   Habilitation (second dissertation) in applied computer science at Graz University of Technology; Second doctoral thesis in topic "adaptive e-learning systems"; promoter Prof. Hermann Maurer

2002   Doctoral dissertation in computer science (with honor) at Graz University of Technology; focus on multimedia information systems
Doctoral thesis "enhanced approaches for knowledge discovery in the Internet"; first reader Prof. Hermann Maurer, second reader Prof. Frank Kappe

1997   Master in Communication Engineering and Economics (with honor) at Graz University of Technology; specialization in computer hardware and software
Master thesis in "stochastic signal processing" (hard and software); supervisor Prof. Willibald Riedler

Recent Appointments

12/2016 – current	Associated Professor, Head of Cognitive and Digital Science (CoDiS) Group, Institute of Interactive Systems and Data Science, Graz University of Technology, Austria
10/2011 – 11/2016	Tenure position, Head of Motivational Media Technology Group, IICM, Graz University of Technology, Austria
10/2006 – 09/2011	Assistant professor, key researcher, and Head of Educational Media Technology group, IICM, Graz University of Technology, Austria
09/2001 – 09/2006	Postdoctoral position and project manager, IICM, Graz University of Technology, Austria
08/1997 – 08/2001	Research assistant and lecturer, IICM, Graz University of Technology, Austria
03/1997 – 07/1997	Project manager for HW Information Server user interface and Web gateway, Hyperwave R&D, Graz, Austria

Research Areas

- Media Technologies and Multimedia information systems
- Information retrieval and visualization
- Natural Language Processing
- e-Education and e-Assessment
- XR for e-Education and Knowledge Transfer
- Computer Games and Gamification for Educational

Honor and Awards

2015   Shortlisted for Wharton 2015 Reimagine Education Awards for MAL approach
2014   Research fellow scholarship, Curtin University of Technology, Perth, Western Australia
2013   Research fellow scholarship, Curtin University of Technology, Perth, Western Australia

2012   Research fellow scholarship, Curtin University of Technology, Perth, Western Australia
        Commented for best paper CAA 2012 (co-author)
2011   Appointment as Visiting Professor, Universidad Galileo, Guatemala City
        Research fellow scholarship, Curtin University of Technology, Perth, Western Australia
        Research fellow scholarship, University of Technology Sydney, Sydney, New South Wales
2010   Research fellow scholarship, Curtin University of Technology, Perth, Western Australia
2009   Research fellow scholarship, Curtin University of Technology, Perth, Western Australia
        Best paper award MIPRO 2009 (Conference Computers in Education)
        Honor of Appreciation for learning ecosystem track chair, IEEE DEST 2009
2008   Adjunct Research Professor, School of Information Systems, Curtin University of Technology,
        Perth, Western Australia
        Research fellow scholarship, Curtin University of Technology, Perth, Western Australia
2007   Best paper award Medinfo 2007 (co-author)
2004   Employees award for outstanding performance (TU-Graz, IICM)
2002   Doctoral program finished with honor
1998   Best paper award EDMEDIA (co-author)
1997   Master program finished with honor

Visiting Positions

- Visiting Professor, University of New Orleans, Computer Science, Prof. Mahdi Abdelguerfi – Center for Environmental Informatics, Feb 2020 (funded by Graz University of Technology)
- Visiting Professor, American University (Washington, USA), School of Communication, Prof. Krysztof Pietroszek – IDEAS Lab, Feb 2020 (funded by Graz University of Technology)
- Visiting Professor, Cyprus University of Technology (Cyprus), Multimedia and Graphic Art, Prof. Andri Ioannou, Jan 2020 (Erasmus Funding)
- Visiting professor, Curtin University of Technology (Western Australia), Curtin Business School (CBS), Prof. Vanessa Chang – Center Learning and Teaching, Jan/March 2019 (co-funded by Curtin University and Graz University of Technology)
- Visiting professor, RMIT (Melbourne, Victoria), Business School (CBS), Prof. Caroline Chang – School of Information Systems, Jan 2019 (funded by Graz University of Technology)
- Visiting professor, University of Sydney (Sedney, NSW), Faculty of Engineering, Prof. David Lowe – School of Computer Science, Jan 2019 (funded by Graz University of Technology)
- Visiting professor, Curtin University of Technology (Western Australia), Curtin Business School (CBS), Prof. Vanessa Chang – Center Learning and Teaching, Jan/March 2017 (co-funded by Curtin University and Graz University of Technology)
- Visiting professor, RMIT (Melbourne, Victoria), Business School (CBS), Prof. Caroline Chang – School of Information Systems, Jan 2017 (funded by Graz University of Technology)
- Visiting professor, Curtin University of Technology (Western Australia), Curtin Business School (CBS), Prof. Vanessa Chang – Center Learning and Teaching, Jan/March 2016 (co-funded by Curtin University and Graz University of Technology)
- Visiting professor, RMIT (Melbourne, Victoria), Business School (CBS), Prof. Caroline Chang – School of Information Systems, Jan 2016 (funded by Graz University of Technology)
- Visiting scholar, Harvard University (Cambridge, USA), Prof. Jud Harward, December 2015 (co-funded by Graz University of Technology)
- Visiting professor, Curtin University of Technology (Western Australia), Curtin Business School (CBS), Prof. Vanessa Chang – Dean of Education CBS, Jan/March 2015 (funded by Curtin University and Graz University of Technology)
- Visiting professor, RMIT (Melbourne, Victoria), Business School (CBS), Prof. Caroline Chang – School of Information Systems, Jan 2015 (funded by Graz University of Technology)
- Visiting professor, Curtin University of Technology (Western Australia), Curtin Business School (CBS), Prof. Vanessa Chang – Dean of Education CBS, Jan/March 2014 (funded by Curtin University)

- Visiting professor, University of Sydney, Sydney, NSW, Australia, School of Computing and Communications, Prof. David Lowe, Jan 2014 (partly funded by Graz University of Technoloy)
- Visiting professor, Curtin University of Technology (Western Australia), Curtin Business School (CBS), Prof. Vanessa Chang – Dean of Education CBS, Jan/March 2013 (funded by Curtin University)
- Visiting professor, University of Sydney, Sydney, NSW, Australia, School of Computing and Communications, Prof. David Lowe, Jan 2013 (partly funded by Graz University of Technoloy)
- Visiting professor, Curtin University of Technology (Western Australia), Curtin Business School (CBS), Prof. Vanessa Chang – Dean of Education CBS, Jan/March 2012 (funded by Curtin University)
- Visiting professor, University of Technology, Sydney, NSW, Australia, School of Computing and Communications, Prof. David Lowe, Jan 2012 (partly funded by Graz University of Technoloy)
- Visiting Academic, Universidad Galileo (Guatemala City), E-learning Lab, November 2011 (Universidad Galileo funding)
- Visiting Academic, City University of New York (CUNY) (NY, USA), LaGuardia Community College, November 2011 (TUG funding).
- Visiting Academic, MIT (USA), Center for Educational Computing Initiatives, Prof. Judson Harward and Prof. John Belcher, May 2011 (partly founded by Graz University of Technology for support of international relationships)
- Visiting professor, University of Technology, Sydney, NSW, Australia, School of Computing and Communications, Prof. David Lowe, Jan 2011 (funded by University of Technology, Sydney)
- Visiting professor, Curtin University of Technology (Western Australia), Curtin Business School (CBS) and Digital Ecosystems and Business Intelligence (DEBI) Institute, Prof. Vaness Chang and Prof. Elisabeth Chang, Jan/March 2011 (funded by Curtin University)
- Visiting Academic, University of Technology, Sydney, NSW, Australia, School of Computing and Communications, Prof. David Lowe, Jan 2010 (funded by University of Technology, Sydney)
- Visiting professor, Curtin University of Technology (Western Australia), Curtin Business School (CBS) and Digital Ecosystems and Business Intelligence (DEBI) Institute, Prof. Elisabeth Chang and Dr. Vanessa Chang, Jan/Feb 2010 (funded by Curtin University)
- Visiting Academic, University of Sao Paulo, Integrated System Laboratory, Prof. Roseli de Deus Lopes, November 2009
- Visiting Academic, University of Salerno, Dipartimento di Matematica e Informatica, Andrea De Lucia, October 2009 (ERASMUS funding)
- Visiting Academic, MIT (USA), Center for Educational Computing Initiatives, Prof. Judson Harward, June 2009 (partly founded by Graz University of Technology for support of international relationships)
- Visiting professor, Curtin University of Technology (Western Australia), Curtin Business School (CBS) and Digital Ecosystems and Business Intelligence (DEBI) Institute, Prof. Elisabeth Chang and Dr. Vanessa Chang, Jan/Feb 2009 (funded by Curtin University)
- Visiting professor, University of Madeira, Institute for Mathematics and Engineering, Prof. Paulo Sampaio, Nov 2008 (ERASMUS funding)
- Visiting professor, Curtin University of Technology (Western Australia), Curtin Business School (CBS) and Digital Ecosystems and Business Intelligence (DEBI) Institute, Prof. Elisabeth Chang and Dr. Vanessa Chang, Jan/Feb 2008 (funded by Curtin University)
- Visiting academic, Curtin University of Technology (Western Australia), Curtin Business School (CBS), Prof. Heinz Dreher, Nov/Dec 2004 (partly funded by Graz University of Technology)

Teaching Experience

Courses and Seminars

- Engaging Media Technologies, master program (2020 – current)
- Game Design and Development, master program (2014 – current)
- Social Media Technologies, master program (2015 – current)
- Knowledge Processing, master program (1998 – 2001)
- Multimedia Information Systems II, master program (2002 – 2003)
- Information Search and Retrieval, master program (2004 - current)
- Project Management, bachelor program (computer Science) (2006 - current)
- Project Management, bachelor program (software Design) (2006 - current)
- Programming project and seminar papers (master level) (1996 – current)
- Programming project and seminar papers (bachelor level) (1998 – current)
- Advanced Media Technologies (doctoral studies) (2010 – current)
- Scientific Work (doctoral studies) (2011)

Overall rating of teaching quality is in the upper range between 1 and 2 on a scale between 1 (best) and 5 (worst).

Supervision Experience

- 5 doctoral theses successfully supervised and 2 co-supervised
- 70 master theses (also international students) successfully supervised or co-supervised
- 50+ programming project and seminar papers (master level)

Research Experience

Scientific Research Projects

- Visual Data Analysis to Support Digital and Scientific Literacy (Visuelle Datenanalyse zur Förderung der Digital und Scientific Literacy VISDAT), 2019 -2021, National Fund Zukunftsfond Steiermark (10th Call – Digitalization)
- Providing Verification Assistance for New Content (Provenance), 2018 – 2021, Horizon 2020, key researcher
- Construction of Management Capacities of MOOCs in Higher Education (MOOC Maker), 2015 – 2018, European Commission Erasmus+ program, key researcher & local project manager
- Adaptive Learning via Intuitive/Interactive, Collaborative and Emotional Systems (ALICE), 2010 – 2012, European Commission FP7 program, key researcher & local project manager
- Cross Boarder Virtual Incubator (CBVI), European Commission Lifelong Learning Program, multilateral projects, key researcher & local project manager
- Understanding People Power on the Web: A Multidisciplinary Approach, 2010 – 2011, International Program Development Fund (IPDF), Australian Research Grand, international research partner, key researcher
- SPRICHWORT (e-learning research project in language training), 11/2008 – 10/2010, EC-founded in the program line "Life-Long Learning/Transversal Programmes", key researcher
- Collaborative Learning and Experimentation applying Immersive Virtual Environments, 10/2008 – current, collaboration with MIT - CECI
- Classroom of the Future (virtual reality, social software, AI, e-learning), 04/2008 – current, faculty research grant; key researcher
- E-Assessment (automatic skill & knowledge assessment and feedback in learning and working settings), 01/2008 – current, internal research project; initiator and project manager
- BERNSTEIN - The Memory of Papers (digital library, IR), 09/2006 – 02/2009, EC funded project; key researcher

- E-Learning Ecosystem (ELES) (e-learning, knowledge management, digital business ecosystem, web services), 09/2006 – current, research initiative in cooperation with CBS, Curtin University of Technology (Western Australia); co-initiator and key researcher
- DELOS (Network of Excellence on Digital Libraries), 01/2004 – 12/2007, EC funded project; key researcher
- MISTRAL (Measurable Intelligent and Reliable Semantic Extraction and Retrieval of Multimedia Data), 2004 – 2006, Semantic Systems Program, Austrian Research Council, project manager
- Adaptive e-Learning with Eye-Tracking (AdeLE) (e-learning, adaptive systems, SOA, enhanced HCI methods), 11/2003 – 10/2007, nationally funded research project; team leader IICM and key researcher
- Measurable Intelligent and Reliable Semantic Extraction and Retrieval of Multimedia Data (MISTRAL) (multimodal information processing, automatic semantic annotation, cross-media retrieval, information visualization), 01/2004 – 12/2006, nationally funded research project; general project manager, team leader IICM and key researcher
- Extended Framework for Information Discovery (xFIND) (IR, Web search methods, information visualization), 01/1998 – 12/2006, open source system; initiator and manager
- Knowledge Discovery in WWW (IR, Web search systems), 01/1999-12/2000, nationally funded research project, team leader

Application-oriented Research Projects

- Virtual 3D World Applications for Museums and Virtual Exhibitions (Research and Prototype for Internet Studio-Isser, Funding program by Federal Ministry of Economy, Family and Youth of the Republic of Austria), 2010
- Intelligent Search Guidance (Research and Prototype for Internet Xohana, Funding program by Federal Ministry of Economy, Family and Youth of the Republic of Austria), 2010
- Virtual 3D World for Business Meetings (Research and Prototype for Sony Austria), 2008
- Consulting for Hyperwave R&D (Research and Design for HW Information Management System, Knowledge Management and E-Learning Suite), 1997 – 2004
- VA-TECH Intranet Application (Hyperwave Information Server, knowledge management), 2002 – 2003, project manager
- Credit Anstalt (CA) Intranet Application (Hyperwave Information Server), 1998 – 2001, project manager
- Infomed Austria, (Hyperwave Information Server Application, Web search system), 1997-1998, project manager
- Public Information System of Styrian Government (Hyperwave Information Server, Web search system), 1997-1998, group leader
- Lufthansa Intranet Application (Hyperwave Information Server), 1997, project manager

Administrative Experience

- Faculty's International Coordinator (2019 – present)
- Faculty's Online Learning Coordinator (2020 – present)
- Member of the institute commission (period 1998 - 1999)
- Responsible for the Institute's Website (2002 – 2004)
- Responsible for the Institute's Library (since 2006)
- Serving as jury member of final examinations (since 2006) at Graz University of Technology
- Serving as jury member of final examinations (since 2008) at University of Madeira
- Serving as jury member of final examinations (since 2009) at Curtin University
- Initiator and local contact for a student exchange program between Computer Science Faculty, Graz University of Technology and Curtin Business School, Curtin University, Perth, Western Australia

- Initiator and local contact for a student exchange program between Computer Science Faculty, Graz University of Technology and School of Information Systems, University of Western Australia, Perth, Western Australia
- Initiator and local contact for a student exchange program between Computer Science Faculty, Graz University of Technology and School of Computing and Communications, University of Technology, Sydney, NSW, Australia
- Computer Science Faculty, Graz University of Technology and School of Information Systems, University of Western Australia, Perth, Western Australia
- Initiator and local contact for a student exchange program between Computer Science Faculty, Graz University of Technology and Faculty of Mathematics, University of Madeira, Portugal
- Initiator and local contact for a student exchange program between Computer Science Faculty, Graz University of Technology and Center for Educational Computing Initiatives, MIT, USA.

External Professional Activities

Chair and Organizational Committees

- iLRN conference series, 2015 program chair, 2016 general chair
- International Workshop on Computer-based Knowledge & Skill Assessment and Feedback in Learning Settings (CAF), initiator and chair, since 2008
- International Workshop on Virtual Worlds for academic, organizational, and life-long learning (ViWo), initiator and co-chair, since 2009
- International Conference on Data Engineering and Management (ICDEM), co-chair for 2009
- IEEE – DEST (Digital Ecosystems and Technologies), e-learning track chair, 2009 and 2010
- ICWL (International Conference on Web-based Learning), Publicity Co-Chairs for 2009
- ICL (International Conference on Interactive Computer aided Learning), Special Track Chair, 2009 until now
- IEEE EDUCON (International Conference of Global Learning in Engineering Education), program co-chair 2010
- Spain ACM SIG Chapter on Computer Science Education (SIGCSE), international advisory board since 2009
- ICBL (International Conference on Blended Learning), advisory board.
- International Workshop on Knowledge Management and e-Human Resources Practices for Innovation (eER-KM2011), Workshop Co-Chair

Editorial Boards and Special Issues Review

- Journal of Universal Computer Science (J.UCS) Managing Editor (2012 – present)
- International Journal of Knowledge and Learning (IJKL) – Co-Editor
- IEEE Transactions on Learning Technologies
- Journal of Information Technology Research (JITR)
- International Journal of Emerging Technologies in Learning (iJET)
- Cypriot Journal of Educational Sciences (CJES)
- International Journal of Engineering Education (IJEE)
- International Journal of Knowledge and Learning (IJKL)
- Infocommunications Journal
- Computers & Education
- World Wide Web Journal (W3J)
- JUKM Special Issue (Multimedia Metadata)
- Journal of Universal Computer Science (J.UCS)
- IEEE Multimedia Journal Special Issue (Multimedia-Metadata and Semantic Management)
- IEEE Transaction on Industrial Electronics (Reviewer)
- M. Granitzer, M. Lux, and M. Spaniol (Eds.) Multimedia Semantics – The Role of Metadata. Springer, book chapter reviews

- C. Pahl (Ed.) Architecture Solutions for E-Learning Systems. Idea Group Inc., Hershey, USA, book chapter reviews
- C. Mourlas, N. Tsianos and P. Germanakos (Eds.) Cognitive and Emotional Processes in Web-based Education: Integrating Human Factors and Personalization. Hershey, USA, book chapter reviews
- M. Ebner and M. Schiefner (Eds.) Looking Toward the Future of Technology Enhanced Education: Ubiquitous Learning and the Digital Native. IGI Global, book chapter review
- A.V.Senthil Kumar (Ed.) Knowledge discovery practices and emerging applications of data mining: Trends and new domains, IGI Global, book chapter review
- Francesca Pozzi & Donatella Persico (Eds.) Techniques for Fostering Collaboration in Online Learning Communities: Theoretical and Practical Perspectives, IGI Global, book chapter review
- Abul K. M. Azad, Michael E. Auer & V. Judson Harward (Eds.) Internet Accessible Remote Laboratories: Scalable E-learning Tools for Engineering and Science Disciplines
- A.V.Senthil Kumar & Hakikur Rahman (Eds.) Mobile Computing Techniques in Emerging Markets : Systems, Applications and Services

Program Committee and Reviews

- IEEE DEST (Conference on Digital Ecosystems and Technologies)
- IEEE ICDEM (International Conference on Data Engineering and Management)
- IEEE ETFA (International Conference on Emerging Technologies)
- IEEE EDUCON (Annual Global Engineering Education Conference)
- IEEE INDIN (International Conference on Industrial Informatics)
- IEEE ICIT (International Conference on Industrial Technology)
- IEEE ISIE (International Symposium on Industrial Electronics)
- IEEE IECON (International Conference of Industrial Electronics Society)
- IEEE INCoS 2009 (International Conference on Intelligent Networking and Collaborative Systems)
- IEEE OPTIM 2010 (International Conference on Optimization of Electrical and Electronic Equipment)
- ACM SIGITE (Special Interest Group on Information Technology Education) Conference
- ACM MEDES'09 (Conference on Management of Emergent Digital EcoSystems)
- ACM International Workshop on Multimedia Technologies for Distance Leaning (MTDL 2010)
- ACM Conference on Information and Knowledge Management 2011
- CADGME, Computer Algebra and Dynamic Geometry Systems in Mathematics Education, working group ConMAs, Convergence on Mathematics Assistants.
- CLEF 2010 LABs (Conference on Multilingual and Multimodal Information Access Evaluation)
- EISTA (International Conference on Education and Information Systems, Technologies and Applications)
- EC-TEL since 2010 (European Conference on Technology Enhanced Learning)
- HIS 2009 (International Conference on Human System Interaction)
- ICL since 2008 (International Conference on Interactive Computer Aided Learning)
- IMCL 2009, 2014 (International Conference on Interactive Mobile and Computer Aided Learning)
- CSEDU since 2012 (International Conference on Computer Supported Education)
- ICDEM 2010 (International Conference on Data Engineering and Management)
- ICWL 2009, 2010 (International Conference on Web-based Learning)
- INCoS 2009 and 2010 (2nd International Conference on Intelligent Networking and Collaborative Systems)
- CSEDU 2009, 2010 (International Conference on Computer Supported Education)
- CITA Conference

- IKNOW 2006 and 2007 (Special Track for Knowledge Visualization and Knowledge Discovery)
- WMSRM 2007 (Workshop Multimedia Semantics - The Role of Metadata)
- M3R 2008 (Workshop on Multimedia Metadata Management & Retrieval)
- OnToContent 2010 (International Workshop on Ontology Content)
- TIR 2008 - 2010 (Text-based Information Retrieval)
- PAN Workshop 2008 and 2009 (Uncovering Plagiarism, Authorship, and Social Software Misuse)
- STEG 2008 and 2009 (Story-Telling and Educational Games)
- GRIT 2009 (GRIT is Remote Instrumentation and Telerobotics for the industry, distance learning and collaboratories)
- SeMuDaTe 2009 Workshop at SAMT 2009 (4th International Conference on Semantic and Digital Media Technologies)
- WM2011 (6th Conference Professional Knowledge Management)
- SLACTIONS 2012 (Research conference on virtual worlds)

Other Professional Activities

- Since 2005 independent expert for the European Commission in the FP 6, FP 7 and E-Content Plus program (multiple research project reviews and research project proposal evaluation involvements)
- Since 2009 reviews for NSF, USA
- Since 2010 reviews for Cyprus Research Council, Cyprus
- Since 2011 reviews for Belgium Research Council, Belgium
- Since 2013 reviews for Etonian Research Council, Etonia
- Since 2013 reviews for National Center of Science and Technology Evaluation, Kazakhstan
- Since 2015 reviews for Ministry of Education, Singapore
- Founder and since 2000 head of Gütl IT Research & Consulting (Graz, Austria), main scope on consulting in information systems and knowledge management
- Co-founder and since 2000 partner of Infodelio Information Systems (Graz, Austria), main scope in information retrieval and wireless applications

Communities Involved

- Board members and co-initiator of the Europe chapter of the Immersive Education Initiative from June 2011 until March 2014
- Global Online Laboratory Consortium (GOLC) – Founding Member
- Member of IEEE
- Member of ACM
- IEEE Education Society members
- ACM Special Interest Group on Information Retrieval
- Sun Immersion Special Interest Group
- European MPEG-7 Interest Group
- Study Group-Competencies (standardization effort for competences)
- OCG (Austrian Computer Society)
- Future Internet Austria Initiative

Publications and Talks

Peer-reviewed Publications

[1] Endah Wulansari, O. D., Pirker, J., Kopf, J. & Gütl, C. (2020). Video Games and their Correlation to Empathy: How to teach and experience empathic emotion. The Impact of the 4th Industrial

Revolution on Engineering Education: Proceedings of the 22nd International Conference on Interactive Collaborative Learning (ICL2019) . Auer, M. E., Hortsch, H. & Sethakul, P. (eds.). Springer, Vol. Volume 1. p. 151-163 13 p. (Advances in Intelligent Systems and Computing; vol. 1134 AISC).

[2] Kasper, P., Koncar, P., Teixeira dos Santos, T. F. & Gütl, C. (2019). On the Role of Score, Genre and Text in Helpfulness of Video Game Reviews on Metacritic. Sixth International Conference on Social Networks Analysis, Management and Security (SNAMS). IEEE Xplore, p. 75 – 82

[3] Rattinger, A., Le Goff, J-M. & Gütl, C. (2019). Semantic and Topological Graphs for Patent Retrieval. Sixth International Conference on Social Networks Analysis, Management and Security (SNAMS). IEEE Xplore, p. 175 - 180

[4] Gaspar, H., Morgado, L., Mamede, H., Oliveira, T., Manjón, B., & Gütl, C. (2019). Research priorities in immersive learning technology: the perspectives of the iLRN community. Virtual Reality, 7 (2019), 1-23.

[5] Steinmaurer, A., Pirker, J., Gütl, C. (2019). sCool – Game-Based Learning in Computer Science Class - A Case Study in Secondary Education. iJEP ,–Vol. 9, No. 2, (2019), 35-50, and https://doi.org/10.3991/ijep.v9i2.9942

[6] Bobic, A., Filippou, J., Cheong, C., Cheong, F. & Gütl, C. (2019). Infret: Enhancing a Tool for Explorative Learning of Information Retrieval Concepts. The Impact of the 4th Industrial Revolution on Engineering Education: Proceedings of the 22nd International Conference on Interactive Collaborative Learning (ICL2019). Springer, Vol. Volume 1. p. 60-66 12 p.

[7] Rattinger, A., Le Goff, J-M., Meersman, R. A. & Gütl, C., (2018). Semantic and Topological Patent Graphs: Analysis of Retrieval and Community Structure. In Proc. of IEEE Fifth International Conference on Social Networks Analysis, Management and Security (SNAMS). Institute of Electrical and Electronics Engineers, S. 51-58

[8] Vitiello, M., Walk, S., Helic, D., Chang, V., Gütl, C. (2018). User Behavioral Patterns and Early Dropouts Detection: Improved Users Profiling through Analysis of Successive Offering of MOOC. Journal of Universal Computer Science, 24, 8 (2018), 10.3217/jucs-024-08-1131

[9] Rattinger, A., Le Goff, J., & Gütl, C. (2018). Local Word Embeddings for Query Expansion based on Co-Authorship and Citations. In Proceedings of the 7th International Workshop on Bibliometric-enhanced Information Retrieval (BIR 2018), Grenoble, France, March 26, 2018, http://ceur-ws.org/Vol-2080/ co-located with the 40th European Conference on Information Retrieval (ECIR 2018)

[10] Pirker, J., Lesjak, I., Parger, M. & Gütl, C. (2018). An Educational Physics Laboratory in Mobile Versus Room Scale Virtual Reality-A Comparative Study. Online Engineering Internet of Things. Springer, p. 1029-1043.

[11] Ebner, M., Khalil, M., Schön, S., Gütl, C., Aschemann, B., Frei, W. & Röthler, D. (2017). How Inverse Blended Learning Can Turn Up Learning with MOOCs? MOOC-MAKER 2017: Proceedings of the International Conference MOOC-MAKER 2017, p. 21-30.

[12] Vitiello, M., Walk, S., Helic, D., Chang, V. & Gütl, C. (2017), Dropouts on the Successive Offering of a MOOC. MOOC-MAKER 2017: Proceedings of the International Conference MOOC-MAKER 2017, p. 11-20.

[13] Pirker, J., Holly, M., Hipp, P., König, C., Jeitler, D. & Gütl, C. (2017). Improving Physics Education through different Immersive and Engaging Laboratory Setups. Proc. of International Conference on Interactive Collaborative and Blended Learning "Education Innovation" ICBL2017, 8 p.

[14] Pirker, J., Pojer, M., Holzinger, A. & Gütl, C. (2017). Gesture-Based Interactions in Video Games with the Leap Motion Controller. International Conference on Human-Computer Interaction, p. 620-633.

[15] Pirker, J., Lesjak, I. & Gütl, C. (2017). Maroon VR: A Room-Scale Physics Laboratory Experience. 2017 IEEE 17th International Conference on Advanced Learning Technologies (ICALT), p. 482-484.

[16] Hutzler, A., Wagner, R., Pirker, J. & Gütl, C. (2017). MythHunter: Gamification in an Educational Location-Based Scavenger Hunt. International Conference on Immersive Learning (iLRN 2017). p. 155-169.

[17] Pirker, J., Khosmood, F. & Gütl, C. (2017). Social network analysis of the global game jam network. Proceedings of the Second International Conference on Game Jams, Hackathons, and Game Creation Events, p. 10-14.

[18] Vitiello, M., Walk, K., Chang, V., Hernandez Rizzardini, R., Helic, D. & Gütl, C. (2017). MOOC Dropouts: A Multi-system Classifier. Data Driven Approaches in Digital Education: Proceedings of 12th European Conference on Technology Enhanced Learning (EC-TEL 2017), Springer, p. 300-314.

[19] Vitiello, M., Gütl, C., Amado-Salvatierra, H. R. & Hernandez Rizzardini, R. (2017). MOOC Learner Behaviour: Attrition and Retention Analysis and Prediction Based on 11 Courses on the TELESCOPE Platform. Learning Technology for Education Challenges (LTEC 2017), Springer, p. 99-109.

[20] Pirker, J., Lesjak, I. & Gütl, C. (2017). An Educational Physics Laboratory in Mobile Versus Room Scale Virtual Reality – A Comparative Study. In : International Journal of Online Engineering, 13, 8, p. 106-120.

[21] Höfler, M., Wesiak, G., Pürscher, P. & Gütl, C. (2017). Modern education and its background in cognitive psychology: Automated question creation and eye movements. Proceedings of 2017 40th International Convention on Information and Communication Technology, Electronics and Microelectronics (MIPRO 2017) . IEEEXplore, Vol. 2017, p. 619-623

[22] Al- Smadi, M., Capuano, N. & Gütl, C. (2016). Decoupling assessment and serious games to support guided exploratory learning in smart education. In : Journal of Ambient Intelligence and Humanized Computing. p. 1-15, DOI: 10.1007/s12652-016-0436-6.

[23] Felfernig, A., Shehadeh, A., Jeran, M., Gütl, C., Tran, T., Atas, M., Polat Erdeniz, S., Stettinger, M., Akcay, A. & Reiterer, S. (2016). StudyBattles: A Learning Environment for Knowledge-based Configuration: none. In International Workshop on Configuration 2016: none. (pp. 109-116). Toulouse.

[24] Settgast, V., Pirker, J., Gütl, C., Lontschar, S. & Maggale, S. (2016). Evaluating Experiences in different Virtual Reality Setups. Entertainment Computing - ICEC 2016: Proceedings of the 15th IFIP TC 14 International Conference on Entertainment Computing, Springer Nature, Vol. 15, p. 115-125.

[25] Morales, M., Amado-Salvatierra, H., Hernandez Rizzardini, R., Pirker, J., & Gütl, C. (2016). A Practical Experience on the Use of Gamification in MOOC Courses as a Strategy to Increase Motivation. In International Workshop on Learning Technology for Education in Cloud, Springer International Publishing, pp. 139-149.

[26] Gütl, C., Tomes, L. M., Pirker, J., & Chang, V. (2016). Exploratory and Collaborative Learning Experience in Immersive Environments. In International Conference on Immersive Learning (iLRN 2016), Springer International Publishing, pp. 3-16.

[27] Pürcher, P., Höfler, M., Pirker, J., Tomes, L. M., Ischebeck, A., & Gütl, C. (2016). Individual versus collaborative learning in a virtual world. In 39th International Convention on Information and Communication Technology, Electronics and Microelectronics (MIPRO). Institute of Electrical and Electronics Engineers.

[28] Pirker, J., Economou, D. & Gütl, C. (2016). Interdisciplinary and International Game Projects for Creative Learning. Proceedings of the 2016 ACM Conference on Innovation and Technology in Computer Science Education, Association of Computing Machinery, p. 29-34.

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[245]   Thomas Dietinger, Christian Gütl, Hermann Maurer, Maja Pivec, Klaus Schmaranz (1998). Intelligent Knowledge Gathering and Management as New Ways of an Improved Learning Process. In: Proceedings of WebNet 98 - World Conference of the WWW, AACE, Internet and Intranet, Charlottesville, USA, pp. 244 – 249 (outstanding paper award).

[246]   Christian Gütl, Thomas Dietinger, Dietmar Neussl, Bernhard Knögler, Klaus Schmaranz (1998). Improved Way for Web-Based Learning using HIKS (Hierarchical Interactive Knowledge System). Accepted Short Paper: Conferece "ICCE 98", Beijing,China 14-17 October, 1998.

[247]   Thomas Dietinger, Christian Gütl, Hermann Maurer, Maja Pivec (1998). GENTLE (GEneral Networked Training and Learning Environment) Die sanfte Einführung in virtuelle Ausbildung. Workshop ICL98 - Interaktives Computerunterstütztes Lernen, Technikum Kärnten, Villach, Austria, 8.- 9. Oktober 1998.

Other Publications

[1]   Christian Gütl (2008). Enhanced Computer-based Support for Personalized Learning Activities. Post Doctoral Lecture Thesis. Graz University of Technology, Austria.

[2]   Christian Gütl (2004). Smart Information Retrieval Concepts - A Study for the Application in Digital Libraries. Position paper for the Gradl Project. TU-Graz, 2004.

[3]   Gerald Eigenstuhler, Victor Manuel García-Barrios, Christian Gütl, Hermann Maurer, Felix Mödritscher (2003). Information Systems for Museums - Feasibility Studie für das System "Informationssystem für Museen. TU-Graz, 2003.

[4]   Victor Manuel García-Barrios, Christian Gütl, Helmut Leitner, Hermann Maurer, Felix Mödritscher, Andreas Opelt, Martin Ruhmer, Thomas Volcan (2002). Firewall Systems - Feasibility Studie für das Viren- und Firewall System "Webguard", 2002.

[5]   Christian Gütl (2002). Ansätze zur modernen Wissensauffindung im Internet. - Eine Annäherung an das Information Gathering and Organizing System xFIND (Extended Framework for INformation Discovery) [Approaches to Modern Knowledge Discovery for the Internet. - An Approach to the Information Gathering and Organizing System xFIND (Extended Framework for INformation Discovery).]. Disertation thesis, Graz University of Technology.

[6]   Christian Gütl, Hermann Maurer (2000). Modern Knowledge Management in WWW - Final Report. Intelligente Wissenserfassung und Wiederauffindung in künftigen WWW-Systemen, Forschungsendbericht, BMWF, 2000.

[7]   Christian Gütl, Keith Andrews, Herman Maurer (1998). Future Information Harvesting and Processing on the Web. Invited paper, presented at conference " European Telematics: advancing the information society", Barcelona, 4-7 February 1998

[8]   Christian Gütl (1996). Erfassung akustischer Vorgänge bei Strömungskavitation [Detection of acoustics processes with reference to fluid cavitation]. Master thesis, Graz University of Technology.

Talks (paper presentations excluded)

[1]   Must we be concerned with the Massive Drop-outs in MOOC? - An Attrition Analysis of Open Courses. Research Seminar, Curtin Business School, Perth, WA, February 2015.

[2]   Must we be concerned with the Massive Drop-outs in MOOC? - An Attrition Analysis of Open Courses. Research Seminar, School of Computer Science, UWA, Perth, WA, February 2015.

[3]   Must we be concerned with the Massive Drop-outs in MOOC? - An Attrition Analysis of Open Courses. Second Wednesday Event, L&T Practice, Murdoch University, Perth, WA, February 2015.

[4]   Must we be concerned with the Massive Drop-outs in MOOC? - An Attrition Analysis of Open Courses. Research Seminar, RMIT Business School, Melbourne, Australia, January 2016.

[5]   Crossing: Virtual Experiences, Games and Teaching. Ludics Seminar (presented together with Johanna Pirker), Harvard University, Cambridge, USA, November 2015.

[6]   Engaging Media Technologies in Modern Learning Settings, HarvardX talk (presented together with Johanna Pirker), Harvard University, Cambridge, USA, December 2015.

[7]   Motivational active learning—Engaging university students in computer science education. Research Seminar, Curtin Business School, Perth, WA, February 2015.

[8]   Creating Engageing Learning and Teaching in the Digital Age, Panel Discussion, Second Wednesday Event, L&T Practice, Murdoch University, Perth, WA, February 2015.

[9] Motivational active learning—Engaging university students in computer science education. Research Seminar, RMIT Business School, Melbourne, Australia, January 2015.

[10] Formative Assessment in Immersive Environments: A Semantic Approach for Automated Evaluation of User Behavior, CBS Seminar, Curtin University, Perth, WA, February 2014.

[11] The Validation of an Integrated Assessment Model for Complex Learning Resources. - in: Curtin Business School Seminar, Curtin University, Perth, WA, February 2013.

[12] Implementation and Evaluation of a Collaborative Learning, Training and Networking Environment. - in: Research Seminar at the Curtin Business School, Curtin University, Perth, WA, February 2012.

[13] Recent Research of Advanced Educational Media Technologies Group, City University of New York (CUNY), LaGuardia Community College, New York, USA (invited talk)

[14] Recent Research in Immersive Education, Universidad Galileo, Guatemala City, November 2011 (invited talk)

[15] Recent Research of Advanced Educational Media Technologies Group, Universidad Galileo, Guatemala City, November 2011 (invited talk)

[16] Entrepreneurship Training using Immersive Virtual Worlds (Talk in German Language), ÖAD, Vienna, September 2011 (invited talk)

[17] E-Assessment. Introductory speech, Third Special Track on Computer-based Knowledge & Skill Assessment and Feedback in Learning Settings (CAF), September 2011, Piestany, Slovakia.

[18] Recent Research of Advanced Educational Media Technologies Group, iED Summit 2011 in Boston, May 2011 (invited talk)

[19] Enhances Approaches of Automatic Creation of Test Items to foster Modern Learning Settings, Curtin University, invited research seminar February 2011 (invited research seminar)

[20] Automatic Creation of Test Items to foster Modern Learning Settings, UWA, February 2011, (invited research seminar)

[21] Virtual 3D Environments for Learning& Training. Introductory speech, Thired Special Track on Virtual 3D Worlds for Learning and Training Activities (ViWo), 2010, Kuala Lumpur, Malaysia.

[22] E-Assessment. Introductory speech, Third Special Track on Computer-based Knowledge & Skill Assessment and Feedback in Learning Settings (CAF), September 2010, Hasselt, Beldium

[23] Immersive Collaborative Virtual Learning Environments for Science Education. Key Note, MIPRO – Computers in Education (CE), May 2010, Opatia, Croatia (invited talk).

[24] Immersive Learning Environments for Science Education. Invited talk at EURECOM, Nice, France, May 2010 (invited talk).

[25] Collaborative Virtual Environments for Learning and Training. Invited talk IEEE Section Slovenia, University of Maribor, November 2009, Maribor, Slovenia (invited talk).

[26] Immersive Collaborative Virtual Environments for Learning and Training Activities. Key Note, ICBL - International Conference on Interactive Computer aided Blended Learning, November 2009, Floranópolis, Brazil (invited talk).

[27] Collaborative Virtual Environments for Learning and Training. University of Sao Paulo, Integrated System Laboratory, November 2009, Sao Paulo, Brazil.

[28] Immersive Collaborative Virtual Environments for Learning and Training Activities. University University of Salerno, Dipartimento di Matematica e Informatica, October 2009, Salerno, Italy.

[29] E-Assessment. Introductory speech, Second Special Track on Computer-based Knowledge & Skill Assessment and Feedback in Learning Settings (CAF), September 2009, Villach, Austria

[30] Enhanced Computer-based Support for Personalized Learning Activities. Graz University of Technology, June 2009.

[31] Virtual 3D Environments for Learning& Training. Introductory speech, First Special Track on Virtual 3D Worlds for Learning and Training Activities (ViWo), 2009, Amman, Jordan.

[32] Ecosystem-based Theoretical Models for Learning in Environments of the 21st Century, Digital Ecosystems and Business Intelligence Institute, Curtin University of Technology, February 2009.

[33] e-Assessment Approaches supporting Personalization in Modern Learning Settings, School of Information Systems, Curtin University of Technology, February 2009,

[34] E-Learning in modern Learning Settings: Selected Research Activities. Guest Lecture. University of Madeira, Portugal.

[35] E-Assessment. Introductory speech, First Special Track on Computer-based Knowledge & Skill Assessment and Feedback in Learning Settings (CAF), 2008, Villach, Austria.

[36] Enhancements of Meeting Information Management and Application for Knowledge Access and Learning Activities, Curtin Business School, Curtin University of Technology, February 2008.

[37] Towards a flexible Computer-Based Assessment System, School of Information Systems – Semantic Eagle Research Group, Curtin University of Technology, February 2008.

[38] Overview of Current Research Work, Digital Ecosystems and Business Intelligence Institute, Curtin University of Technology, February 2008.

[39] Christian Gütl (2005). Information Retrieval and Visualization of MPEG-7-based Meeting Information applying the Open Source Tool xFIND. 3rd MPEG-7 Workshop, Aachen, Nov. 2005 (Invited talk).

[40] MPEG-7 Requirements and Application for a Multi-Modal Meeting Information System. Insights and Prospects within the MISTRAL Research Project. MPEG-7 Workshop, IKNOW 05, Graz, Austria, 2005 (Invited talk).

[41] Horst Bischof, Christian Gütl und Peter Lipp (2005).How to get a research grant: Insider information from EU grant evaluations. Informatik Fakultät, TU-Graz, May 2005.

[42] Christian Gütl (2004). Research in Information Retrieval - An introduction in current research projects (xFIND, AdeLE, MISTRAL). Curtin Business School, Curtin University of Technlology, 10th Dec. 2004.

[43] Future Information Harvesting and Processing on the Web. "European Telematics: advancing the information society", Barcelona, 4-7 February 1998 (invited talk).

Supervision Experience

Supervised and Co-Supervised Doctoral Theses (finished)

[1] Rocael Hernandez Rizzardini (2015). FLEXIBLE EDUCATIONAL ENVIRONMENTS: ORCHESTRATION OF LEARNING ACTIVITIES THROUGH SEMANTIC INTEROPERABILITY. Graz University of Technology (supervisor).

[2] Markus Lanthaler (2014). Third Generation Web APIs - Bridging the Gap between REST and Linked Data. Graz University of Technology (supervisor).

[3] Mohamed Soliman (2014). Intelligent Pedagogical Agents in Immersive 3D Virtual Learning Environments. Graz University of Technology (supervisor).

[4] Mohammad AL-Smadi (2012). FLEXIBLES UND INTEGRIERTES E-ASSESSMENT IN KOMPLEXEN LERNRESSOURCEN: EIN SERVICE-ORIENTIERTER ANSATZ FÜR COMPUTERBASIERTES UND COMPUTERGESTÜTZTES KNOWLEDGE ASSESSMENT. Graz University of Technology (supervisor).

[5] Victor Manuel Garcia Barrios (2007). Personalisation in Adaptive E-Learning Systems: A Service-Oriented Solution Approach for Multi-Purpose User Modelling Systems. Graz University of Technology (co-supervised).

[6] Felix Moedritscher (2007). Implementation and Evaluation of Pedagogical Strategies in Adaptive E-Learning Environments. Graz University of Technology (co-supervised).

Supervised and Co-Supervised Doctoral Theses (running)

[1] Alexander Nussbaumer. Adaptive Control of Learning Management Systems based on the Knowledge Space Theory. Graz University of Technology (supervisor).

[2] Johann Pirker. Gamification Approaches in Learning and Training Activities. Graz University of Technology (supervisor).

[3] Joachim Maderer. Automated Assessment and Feedback in interactive, immersive Environments. Graz University of Technology (supervisor).

[4] Byron Haroldo Linares Roman. Towards an Specification for Flexible Interoperability for Cloud Services for Learning and Training Settings.

[5] Tanja Machet. IMPROVING LABORATORY LEARNING OUTCOMES: AN INVESTIGATION INTO THE EFFECT OF CONTEXTUALISING LABORATORIES USING VIRTUAL WORLDS AND REMOTE LABORATORIES. University of Sydney, Australia (co-supervisor).

[6] Emanuel Reiterer. Ontology Powered Semantic Digital Library Architecture. Curtin University, WA (co-supervisor).

Supervised and Co-Supervised Diploma Theses (finished)

[1] Dominik Angerer (2015). Design, Implementation and Evaluation of a Virtual World for Subject-Oriented Business Process Modelling. Graz University of Technology.

[2] Lisa Maria Tomes (2015). Exploratory and Social Learning in 3D Virtual Worlds

[3] Patrick Gregor Weghofer (2014). Flexible Science Fiction Prototyping-Environment in Open Wonderland

[4] Thomas Klaus Wiesner (2014). Learning Algorithms for Information Extraction from Foreign Exchange Market News

[5] Pirmin Riedmann (2014). Realistic Immersive Virtual Agent-Based Learning Environment (RIVALE) - Case Study for Technology Enhanced Learning of Requirements Elicitation Skills

[6] Christian Schratter (2013). Integration of a Java Physics Framework in a Virtual World - Techniques Applied for Redesigning an Educational 3D Software to Run in Distributed Environments

[7] Joachim Maderer (2013). Flexible Assessment in Immersive Environments Development of an Externalized and Automated Assessment Approach in the Exemplary Domain of STEM Education

[8] Jörg Sandriesser (2013). Design and Implementation of a Gamification-based Information System

[9] Hannes Gritsch (2013). Design und Implementierung Geografischer Informationsverarbeitung in einem Social Media Portal

[10] Johanna Pirker (2012). Virtual TEAL World - Eine interaktive und kooperationsfördernde Virtuelle Welten Umgebung für den Physikunterricht

[11] Magdalena Lauber (2012). Stock Market Sentiment Analysis

[12] Davorin Miljic (2012). Softwaretechnische Unterstützung des Bologna-Prozesses: Implementierung der Lehrveranstaltungsmodule im CAMPUSonline

[13] Stefanie Boruta (2012). Lernumgebung zum Erlernen von Fremdsprachen unter Verwendung von Web 2.0-Technologien

[14] Dominik Kowald (2012). Kombination von Computergestützten, Kollaborativen Lernens mit E-Assessment: Erweiterung eines Wiki Systems mit Flexiblen Assessment Methoden

[15] Stefan Berger (2012). Physikexperimente für Hochschulen in einer virtuellen 3D-Welt

[16] Karl Haas (2012). Flexible Lernumgebung in Virtuellen 3D Welten

[17] Korab Qerkini (2011). Erweiterung von Open-Source Content Management Systemen zur Semi-automatischen Erstellung von Web-basierenden und Plattform-nativen Mobilen Applikationen

[18] Andreas Weinberger (2011). Computer-unterstützte Aufsatz Beurteilung basierend auf flexiblen Rubriken

[19] Christian Andrich (2011). Analyse von Datenbanken mit strukturierten und unstrukturierten Daten mit Hilfe von Text Cube und automatischer Extraktion von Taxonomien

[20] Andreas Felix Hütter (2011). Unterstützung von Personalisierungssystemen mittels Collaborative Filtering durch Erschließung externer heterogener Daten

[21] Stefan Freudenthaler (2011). Flexible Learning Settings in Second Life. In Cooperation with Curtin University of Technology, Perth, WA..

[22] Daniel Berger (2011). Supporting Tool for Moderation in the Grading Process of Summative Assessments Design and Prototype of a Software Tool for Moderation and Assessment with Variable Rubrics. In Cooperation with Curtin University of Technology, Perth, WA.

[23] Emanuel Reiterer (2010). Deriving ontologies and assessment rubrics for electronic documents with human support for automatic assessment purposes. In Cooperation with Curtin University of Technology, Perth, WA.

[24] Simone Kopeinik (2010). Virtual 3D World for Distance Learning in Higher Education. In Cooperation with Curtin University of Technology, Perth, WA.

[25] Klaus Lankmayr (2010). Entwurf und Entwicklung von Konzepten zur automatischen Fragengenerierung [Design and Development of Concepts for Automatic Exercise Creation]. Graz University of Technology.

[26] Joachim Weinhofer (2010). Extraktion semantisch relevanter Daten aus natürlich sprachlichen Inhalten in Hinblick auf eine automatische Fragengenerierung [Extraction of relevant semantic data from natural language texts in the view of automatic question generation]. Graz University of Technology.

[27] Mirza Hadzic (2010). Supporting Distributed Software Teams with 3D Virtual Worlds - Design and prototype of a 3D virtual world environment for virtual collaboration in software engineering. Graz University of Technology.

[28] Tina Scheucher (2010). Virtual 3D Worlds for virtual or remote laboratories at learning processes. In cooperation with MIT, USA.

[29] Domink Schrank (2009). A Trustful Payment System for virtual Worlds. Graz University of Technology.

[30] Josef Robert Moser (2009). The Electronic Assessor - Automatic Knowledge Assessment in the AdeLE E-Learning Environment. Graz University of Technology.

[31] Ângelo Manuel Franco Spínola (2008). Improved Management, Retrieval and Access of Presentation Recordings for Enhanced Learning Processes. University of Madeira, Portugal.

[32] Fatima da Cruz Bras Brazao (2008). Improved Skill Model Applied to Business Processes Management. University of Madeira, Portugal.

[33] Stephan Spat (2007). Prototype of a Medical Information Retrieval System for Electronic Patient Records. Graz University of Technology.

[34] Helmut Mader (2007). Visualizing Multidimensional Metadata Development of the Visualization Framework MD2VS. Graz University of Technology.

[35] Dengya Zhu (2007). Improving the Relevance of Search Results via Search- term Disambiguation and Ontological Filtering. Curtin University of Technology (external co-supervisor).

[36] Christian Safran (2006) A Concept-Based Information Retrieval Approach for User-oriented Knowledge Transfer. Graz University of Technology.

[37] Martin Ruhmer (2005). Informationsagenten für die SMART Agenten Plattform [Information agents for the SMART Agent Platform]. Graz University of Technology.

[38] Christoph Fröschl (2005). User Modeling and User Profiling in Adaptive E-learning Systems. Graz University of Technology.

[39] Christian Trummer (2004). Adaptierbare Webapplikationen - Adaptierbarkeit der Hyperwave Information Server Applikation "Support Tracking System" [Adaptable Web applications - Adaptability of the Hyperwave Information Server Application "Support Tracking System"]. Graz University of Technology.

[40] Oliver Strasser (2004). Implementierung eines Projektkoordinations-Systems unter Hyperwave [Implementation of a project coordination system with Hyperwave]. Graz University of Technology.

[41] Wilfried Lackner (2004). Verteilte Informationsstrukturen zur modernen Wissensauffindung im Internet [Distributed Informationstructure of Modern Information Retrieval Systems]. Graz University of Technology.

[42] Peter Glantschnig (2004). Innovative Content Management Systeme im Betrachtungsfeld von Java 2 Enterprise Edition [Innovative Content Management Systems within the scope of Java 2 Enterprise Edition]. Graz University of Technology.

[43] Robert Hoffmann (2003). Entwicklung einer benutzerunterstützten automatisierten Klassifikation von Web-Dokumenten [Development of an user-supported automated classification of Web documents]. Graz University of Technology.

[44] Felix Moedritscher (2002). Wissensmanagement in großen und verteilten Technologie-Unternehmen [Knowledge management for large and distributed technology companies]. Graz University of Technology.

[45] Garcia Barrios Victor Manuel (2002). Informationsaufbereitung und Wissensorganisation in transnationalen Konzernen [Information Enhancing and Knowledge Organisation in Corporate Enterprises]. Graz University of Technology.

[46] Wolfgang Richter (2001). Virtual Communities und Customer Relationship Management [Virtual Communities and Customer Relationship Management]. Graz University of Technology.

[47] Gerald Reif (2000). Moderne Aspekte des Wissensverarbeitung: Ein interaktiver Lernbehelf für das Web Based Training [Modern Knowledge Processing An interactive Tutorial for Web Based Training]. Graz University of Technology.

[48] Juergen Heber (2000). Untersuchung gegenwärtiger Information Retrieval- und Klassifikationssysteme sowie Entwicklung eines Brokerprototyps [Analysis of current Information Retrieval and Classification Systems and Development of a Broker Prototype]. Graz University of Technology.

[49] Johann Weitzer (2000). Verwendung von Qualitäts-Metadaten zur verbesserten Wissensauffindung und Testimplementierung im xFIND System [The use of quality metadata for a better knowledge discovery and test implementation in the xFIND search-system]. Graz University of Technology.

[50] Harald Erich Forstinger (1999). Analyse gegenwärtiger Suchdienste und Konzepte für künftige Wissensauffindung [Analysis of present search services and concepts for knowledge discovering in the future]. Graz University of Technology.

[51] Harald Schwarzmann (1999). Hierarchische Benutzerverwaltung unter Hyperwave [Hierarchical Useradministration in Hyperwave]. Graz University of Technology.

[52] Herbert Legenstein (1999). Qualitätsaspekte zur Wissensauffindung und Testimplementation für das xFIND System [Quality Aspects of Knowledge Discovery and Testimplementation for the xFIND System]. Graz University of Technology.

[53] Bernhard Knoegler (1999). Wissensauffindung in verteilten Systemen Lokale Suchmaschine und Informationsaufbereitung für externe Suchdienste [Knowledge Discovery in Distributed Systems Local Search Engine and Information Processing for External Search Services]. Graz University of Technology.

[54] Wolfgang Goetzinger (1998). Testimplementation einer Audiodatenbank auf dem Hyperwave Information Server [Implementation of an audio database for the Hyperwave Information Server]. Graz University of Technology.

[55] Dietmar Neussl (1998). Weiterentwicklung von Werkzeugen zur Wissensauffindung im World-Wide-Web [Development of Software Tools for Knowledge Discovery in the World Wide Web]. Graz University of Technology.