

## Curriculum Vitae (Lebenslauf)

Name: **Helmut Hlavacs**

Date and place of birth: December 4th 1969, Vienna, Austria

Nationality: Austria

Academic degrees: Univ.-Prof. Dipl.-Ing. Dr. (Full.Prof., MSc, PhD)

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### Education:

1988: High School Diploma (Matura) magna cum laude (Vorzug).

1988—1993: Studies in **Technical Mathematics**, Technical University of Vienna

1993: Dipl.Ing. (MSc) in Technical Mathematics, Technical University of Vienna

2001: PhD (Dr.) of Technical Sciences (**Numerical Analysis**) at the Technical University of Vienna, received with distinction (mit Auszeichnung)

### Employment:

1986: 1 month work with Department for Organizations, Allgemeine Unfallversicherungsanstalt, Vienna (Programming for Informix under SINIX)

1987: 1 month internship at Dataservice, Vienna (Program testing)

1988: 1 month internship at Dataservice, Vienna (Program testing)

1989: 1 month internship at IBM, Vienna (Maintenance of a computer network)

1990: 2 months internship at IBM, Vienna (Programming tools for Presentation Manager and Database Manager)

1991: 2 months internship at IBM, Vienna (Programming for Programmer's Workbench and LAN Library Management System)

1991: Tutor at the Institute for Applied and Numerical Mathematics, Technical University of Vienna

1992: 1 month work with Siemens, Vienna (Programming for an X25 plug-in under SINIX)

1992: Tutor at the Institute for Applied and Numerical Mathematics, Technical University of Vienna

1992—1993: Part time job at IBM (Programming test software and TCP/IP and NETBIOS modules for a communication layer under OS/2)

1995—1998: Part time job at Bank Austria, Vienna (Design and programming of database client/server applications and tools under MS-DOS, Windows 3.11, Windows NT and OS/2)

1998—2000: Employed at the Institute for Computer Science and Business Informatics (Designing stochastic processes and user behavior models for network simulation for the ESPRIT project BISANTE)

2000—2004 Assistant professor (Univ.Ass.) at the Institute for Computer Science and Business Informatics of the University of Vienna. Teaching coordinator of the institute.

2004—2011 **Associate professor** (Ao.Univ.-Prof.) at the University of Vienna at the Dept. of Distributed Systems at the Faculty of Computer Science of the University of Vienna.

2008 Sept. 2008 – December 2008: **Visiting professor** at IRIT, Universite Paul Sabatier, Toulouse, France.

2010 Sept. 2010, Guest researcher at University of the Balearic Islands, Palma, Mallorca.

2011— **Full professor** for Applied Computer Science and **head** of the Research Group *Entertainment Computing* at the Faculty of Computer Science of the University of Vienna.

## Project Experience

- 1991—1993 Design and development of the discrete event simulator D\_SIM (based on colored Petri nets) at the Institute for Analysis, Technical Mathematics and Insurance Mathematics, Technical University of Vienna
- 1994—2004 Participation in FWF project S5304 "AURORA" at the Institute for Applied and Numerical Mathematics, Technical University of Vienna. Project was about High-Performance Computing and Applications.
- 1995—1998 Database design and development (MS Access, MS SQL Server)
- 1998—2000 Design and development of stochastic user models (ESPRIT project BISANTE)
- 2001—2004 Measuring the QoS of a satellite based content delivery network (IST project CODIS).
- 2003—2006 Modelling and measuring Video QoS. Cooperation with Rohde&Schwarz.
- 2004—2006 Next Generation Internet (EuroNGI). Network of Excellence financed by the European Commission.
- 2006—2010 Softnet Austria. Reliability and performance by self-adaptiveness. Nationally funded.
- 2006—2008 Future Generation Internets (EuroFGI). Network of Excellence financed by the European Commission.
- 2007—2008 Virtual Home Environments, Specifically Targeted Research Project of the Network of Excellence EuroFGI. Role: Project Leader
- 2008—2009 Network of the Future (EuroNF). Network of Excellence financed by the European Commission.
- 2009—2012 Content Aware Coding of Mobile TV. Research project funded by the city of Vienna (WWTF) about QoE of mobile TV.
- 2009—2011 Ambient Assisted Shared Living (AMASL), industry project about communication tools for elderly people.
- 2009—2013 COST Action IC804, Energy efficiency in large scale distributed systems. Role of vice-chair and grant holder of the Action.
- 2010—2013 EuroNF Network of Excellence: Local Team Leader
- 2010—2011 Specifically Joint Research Project SPEC, Security for Measuring Energy of Households and Virtual Machines in data centers.
- 2010—2013 Project Roadcell, together with FTW, A1, Asfinag: detecting traffic jams using mobile phone data.
- 2011—2012 Project ICARUS, sponsored by FFG: virtual reality for elderly people.
- 2012—2015 Project Play the Net, sponsored by Internet Service Providers Austria. A serious game about the Internet. Role as project leader.
- 2013—2016 Project INTERACCT, sponsored by Austrian FFG and industry partner. A gamified communication platform for ill children. Role as project leader.
- 2013—2016 Project PRECIOUS, sponsored by the EU FP 7 program. Our part is a gamified web platform for behavioral change.
- 2014—2015 Project UniGame: We create the official computer game for the 650<sup>th</sup> anniversary of the University of Vienna.
- 2014—2015 Internet Hero 2.0, sponsored by Internet Service Providers Austria. A serious game about the Internet. Role as project leader.
- 2015—2016 Cooperation with Talentify GmbH on Gamification, FFG Innovationsscheck.
- 2016—2017 Cooperation with Hoehenflug GmbH on VR, FFG Innovationsscheck.
- 2016—2017 Cooperation Spot GmbH, FFG Innovationsscheck
- 2017— Project proGame, nationally funded Sparkling Science project about teaching school children to program. Role as contributor.
- 2017— Austrian Academy of Science (ÖAW), DOC.TEAM three year grant for my PhD student DI Barbara Göbl. Role as PhD advisor.

## Teaching Experience

- 1991/WS: Tutor at the Institute for Applied and Numerical Mathematics, Technical University of Vienna. Course *Numerical Mathematics for Computer Scientists*.
- 1992/WS: Tutor at the Institute for Applied and Numerical Mathematics, Technical University of Vienna. Course *Numerical Mathematics for Computer Scientists*.
- 1999/SS: Tutor at the Institute for Computer Science and Business Informatics. Course *Planung und Realisierung von Informatik Projekten*.
- 1999/WS: Tutor at the Institute for Computer Science and Business Informatics. Course *Planung und Realisierung von Informatik Projekten*.

- 2000/SS: Tutor at the Institute for Computer Science and Business Informatics. Course *Planung und Realisierung von Informatik Projekten*.
- 2000/WS— Teaching courses about:
- PC Technology
  - Distributed Systems
  - Distributed programming with C++ (CORBA)
  - Distributed programming with Java (RMI, CORBA, Jini, JavaSpaces)
  - Network dimensioning and performance
  - Programming Techniques (C++, Perl)
  - Theory of Computer Science
  - Computer Architecture and Communication Systems
  - Wireless Systems
  - Seminars for Ph.D. and Masters students
  - Advanced Media Technologies (Cloud Gaming)
  - Internet technologies
  - Network Technology for Multimedia Applications
  - Real time computer graphics, render engines
  - Physics and AI for computer games
  - Computer Networks (basic course)
  - Operating Systems

## Awards

- Main price in category **Education and Health** of the **eAward 2017** has been awarded to the project INTERACCT. The eAward is sponsored by the Austria Chancellor's Office.  
<http://www.report.at/component/k2/item/90225-eaward-2017-kategorie-bildung-und-gesundheit>  
<https://www.flickr.com/photos/award2008/albums/72157677227580333/with/32236804214/>
- **Best paper award** at IEEE ICCAC 2016 conference.
- **Occursus 2016** Main Award (for INTERACCT), awarded by Österreichischen Gesellschaft für Hämatologie und Medizinischen Onkologie (Austrian Society of Hematology & Medical Oncology, <https://www.occursus.at/>).
- Awarded **Appreciation Award** by the Faculty of Computer Science in the category “Third party funding 2010-2014”, 2<sup>nd</sup> rank during the time period **2010-2014** (March 2015).
- **Bank Austria Sozialpreis 2014** (2<sup>nd</sup> place)
- **Best paper award** at the iiWAS 2014 conference.
- **Nomination** for **Best Game** and **Best Student Project** for the Austrian Computer Graphics Award 2014 for our game **Internet Hero**.
- **Exhibitor award** at Game Days 2014 conference in Darmstadt for our game **Internet Hero**.
- **Best paper award** at the ISPR 2014 conference.
- Awarded **Appreciation Award** by the Faculty of Computer Science in the category “Third party funding 2009-2013”, 1<sup>st</sup> rank for achieving **16% of the whole faculty third party funding** during the time period **2009-2013** (March 2014).
- **Best paper award** at the ICEC 2013 conference.
- Awarded **Appreciation Awards** by the Faculty of Computer Science in the categories “Third party funding 2008-2012”, “Successfully Acquired Project Funds 2012”, and “A/B Publication Strategy 2012”. (March 2013). Only faculty member being awarded in all three categories.
- **Second best paper award** at the ISPR 2012 conference.
- **Best paper award** at the ICEC 2012 conference.
- **Best paper award** at the Cloud Computing 2012 conference.
- **Best paper award** at the GAMEON ASIA 2012 conference.
- Awarded an **Appreciation Award** by the Faculty of Computer Science in the category “Third party funding” for achieving 19% of the overall third party funding (ex aequo second place) of the whole faculty over the time period 2009-2011 (March 2012).
- Awarded an **Appreciation Award** by the Faculty of Computer Science in the category “Third party funding” for achieving 20% of the overall third party funding (ex aequo first place) of the whole faculty over the time period 2008-2010 (March 2011).
- Only faculty member being awarded **Appreciation Awards** by the Faculty of Computer Science in **both** categories “Third party funding” and “High quality scientific publications” (March 2010).

- **Distinguished paper award** at the OPNETWORKS 2000 conference.

## Media Appearances

- ORF Radio Ö1, Radiokolleg "Das geht ins Auge: Dem Seh-Sinn auf der Spur" (6.9.2018)
- Bildungs-TV der Oberösterreichischen Zukunftsakademie:
  - <https://www.youtube.com/watch?v=qRMX0VAXtJs>
  - [https://www.youtube.com/watch?v=x\\_8RpmNowRM](https://www.youtube.com/watch?v=x_8RpmNowRM)
  - <https://www.youtube.com/watch?v=cY-eU-LFLrA>
- ORF Heute (23.3.2018): <http://tvthek.orf.at/profile/Oberoesterreich-heute/70016/Oberoesterreich-heute/13971088>
- National Magazine Profil 12/2018, Special issue on Innovation/e-tourism, page 72: <https://www.profil.at/ausgaben/profil-1812>
- FM4 live Twitch Broadcast from the Best fair (1.3.2018): <https://www.twitch.tv/videos/234016710>
- ORF Radio Ö1 (Salzburger Nachstudio) about INTERACCT (13.12.2017): <http://oe1.orf.at/programm/20171213/497387>
- ORF article about Third Mission (24.11.2017): <http://orf.at/stories/2415925/2415906/>
- ORF-Interview at weXelerate (19.11.2017): <https://www.facebook.com/553577838028208/posts/1644794875573160>
- Computer Scientist of the Week (7/2017): <http://www.informatikaustria.at/blog/helmut-hlavacs-informatikerinnen-kurzinterviews/>
- Competence magazine (1/2017), Postgraduate Center of the University of Vienna, special issue on Innovation: <http://www.postgraduatecenter.at/aktuelles/competence/>
- International coverage of our game Purpose:
  - <http://www.lanacion.com.ar/1944314-un-juego-descubre-si-se-tienen-prejuicios-racistas-mientras-las-persiguen-zombis>
  - <http://yucatan.com.mx/imagen/la-influencia-los-estereotipos>
  - <http://www.alfabetajuega.com/noticia/un-estudio-utiliza-un-videojuego-de-zombis-para-determinar-si-el-usuario-es-racista-o-sexista-n-74401>
  - <http://www.latercera.com/noticia/videojuego-de-zombies-ayuda-a-descubrir-si-somos-racistas-o-sexistas/>
- Radio Eins (8.10.2016): [http://www.radioeins.de/programm/sendungen/sendungen/15/1610/161008\\_eins\\_die\\_profis\\_28221.html](http://www.radioeins.de/programm/sendungen/sendungen/15/1610/161008_eins_die_profis_28221.html)
- Die Presse (5.10.2016): <http://karrierenews.diepresse.com/home/karrieretrends/5096747/Zombies-und-Vorurteile>
- Der Standard (4.10.2016): <http://derstandard.at/2000045339437/Mit-Zombie-Hilfe-sexistische-und-rassistische-Vorurteile-entlarven>
- Wiener Zeitung (4.10.2016): [http://www.wienerzeitung.at/themen\\_channel/wz\\_digital/spielplatz/848490\\_Einfaches-Zombie-Spiel-liess-Vorurteile-erstaunlich-offen-heraustreten.html](http://www.wienerzeitung.at/themen_channel/wz_digital/spielplatz/848490_Einfaches-Zombie-Spiel-liess-Vorurteile-erstaunlich-offen-heraustreten.html)
- Kleine Zeitung (4.10.2016): <http://www.kleinezeitung.at/lebensart/gesundheit/5096089/Wiener-Forscher-Dieses-ZombieSpiel-entlarvt-Rassisten>
- Kurier (5.10.2016): <https://kurier.at/amp/leben/zombie-spiel-verdeutlicht-sexistische-vorurteile/224.514.702>
- ORF Radio Wien (4.10.2016): <http://wien.orf.at/news/stories/2798655/>
- APA Science (4.10.2016): [https://science.apa.at/rubrik/kultur\\_und\\_gesellschaft/Zombie-Spiel-setzte-Vorurteile-erstaunlich-offen-frei/SCI\\_20161004\\_SCI39351351632313380](https://science.apa.at/rubrik/kultur_und_gesellschaft/Zombie-Spiel-setzte-Vorurteile-erstaunlich-offen-frei/SCI_20161004_SCI39351351632313380)
- Austrian Press Agency (APA, 21.9.2016): [http://www.ots.at/presseaussendung/OTS\\_20160921\\_OTS0201/purpose-rassismus-und-sexismus-in-einem-serious-survival-game-approaching-racism-and-sexism-within-a-serious-survival-game](http://www.ots.at/presseaussendung/OTS_20160921_OTS0201/purpose-rassismus-und-sexismus-in-einem-serious-survival-game-approaching-racism-and-sexism-within-a-serious-survival-game)
- Die Sonne 3/2016, Magazine of the Association for Child Cancer Help, [http://www.kinderkrebshilfe.at/MDB/pageflip/SONNE\\_3\\_16/#sonne-3\\_16-web/page/6-7](http://www.kinderkrebshilfe.at/MDB/pageflip/SONNE_3_16/#sonne-3_16-web/page/6-7)
- International magazine **Business Destinations**, Summer 2016, pp. 56-57: <http://www.businessdestinations.com/magazine/>
- Heute (31.5.2016): Short mentioning of INTERACCT
- presstext.at (12.5.2016): <http://www.presstext.com/at#news/20160512003>
- National newspaper Krone Gesund (30.4.2016)
- Magazine Forschen und Entdecken (01/2016): [https://inwien.at/fileadmin/user\\_upload/ePaper/forschen-entdecken-2016-01/index.html#/html5/mag//page/24](https://inwien.at/fileadmin/user_upload/ePaper/forschen-entdecken-2016-01/index.html#/html5/mag//page/24)
- Austrian Press Agency (APA, 3.2.2016): <http://go.apa.at/qw8OpWXh>

- Uni View magazine (3.12.2015): <http://medienportal.univie.ac.at/uniview/forschung/detailansicht/artikel/ugame-die-universitaet-als-computerspiel/>
- National magazine Profil Wissen (2.12.2015)
- National newspaper Die Presse (22.11.2015): <http://diepresse.com/home/wirtschaft/economist/4871599/Ein-Spiel-fur-Arzt-und-Kind>
- ORF Heute Mittag (20.11.2015): <http://tvthek.orf.at/program/heute-mittag/4660089/heute-mittag/11016535/Trostgeschichten-fuer-Kinder/11016552>
- National newspaper Die Krone (7.11.2015): Both projects of Wunderkammer 2015 covered.
- National newspaper Kurier Futurezone (6.11.2015) <http://futurezone.at/science/tu-wien-feiert-200-jahre-mit-virtuellem-fallschirmsprung/162.560.289>
- National newspaper Die Presse (22.8.2015): <http://diepresse.com/home/science/4804236/Drohnen-als-Touristenfuhrer>
- National radio Ö1 Von Tag zu Tag (31.7.2015): <http://oe1.orf.at/programm/409908>
- Drone Video in Uni View magazine (22.7.2015): <https://medienportal.univie.ac.at/videos/uni-wien-forscht/detailansicht/artikel/mit-der-drohne-um-die-welt/>
- National radio Ö1 Moment Leben Heute (17.6.2015): <http://oe1.orf.at/programm/407064>
- **GEO, Russian edition** (10.6.2015): <http://www.geo.ru/puteshestviya/sidite-doma-0>
- **New Scientist** (6.6.2015): <http://www.newscientist.com/issue/3024>  
Numerous repeats and translations of the New Scientist article around the world: dailymail, eyeondrones, dronelife, techtimes, liligo, whatravel, etc.
- National newspaper Der Standard Forschung Spezial (20.5.2015) <http://derstandard.at/2000016055898-2765/Wenn-der-Arzt-das-Computerspiel-verordnet>
- National newspaper Kurier Futurezone (30.3.2015): <http://futurezone.at/digital-life/interacct-app-soll-kranken-kindern-helfen/115.182.650>
- National radio Ö1 Rudi der Radiohund (11.2.2015): <http://oe1.orf.at/programm/396743>
- Uni View magazine (16.6.2014): <https://medienportal.univie.ac.at/uniview/forschung/detailansicht/artikel/wie-videospiele-schwerkranken-kindern-helfen/>
- National newspaper Kurier Futurezone (17.1.2012): <http://futurezone.at/b2b/uni-wien-informatik-grundlagen-fuer-gamer/24.572.605>
- Uni View magazine (6.5.2011): <https://medienportal.univie.ac.at/uniview/forschung/detailansicht/artikel/mobil-im-bild-sein/>

## External Evaluation 2013

In December 2013, the Faculty of Computer Science was evaluated by external reviewers, i.e., a group of four well-known European computer scientists. Their final assessment of the Research Group Entertainment Computing is as follows:

“This research group is one of the smaller groups, consisting of 1 professor, 2 postdocs and 1 praedoc. The group changed from “Distributed systems” into “Entertainment Computing” in 2011. The main foci of the group are theory and practice of computer games, and quality of experience of multimedia communication. Research topics include games, E-health, virtual reality, physics based animation, and technology for ill children and the elderly. The approach of the group is interdisciplinary.

Cooperation exists with the Institute of Communication Science and Mass Media, and three psychology institutes of the University of Vienna. Currently the group is involved in three national projects and a FP7 project is on the way. The group enjoys great interest among the students at advanced Bachelor and Master level, as exemplified by the numerous interesting project demos during the site visit. The societal relevance of the research is high. The reviewers evaluate the performance of the group – the quantity and quality of the research output, prominence of the researchers, national and international integration and co-operation, impact on society and interaction with society – as very good.”

## Start Up Robimo.at

My start up company Robimo GmbH (Robots in Motion) launched in autumn 2015 (<http://www.robimo.at/>). We build drones in several categories. Our fully redundant octocopter has been given a C-license by Austro Control. This

means it may fly in densely populated areas. Our big drone is able to carry 10kg of weight and fly for 1 hour (when lightly loaded).

## Arts Projects

- Scientific board member of the exhibition Dialog 2016 (Computer Games and Arts): <http://dialog2016.at/>
- Two Exhibits at Wiener Wunderkammer 2015: <http://www.wunderkammer2015.at/>
- Exhibit at Vienna Biennale 2015 (Museum of Applied Arts Vienna): <http://www.viennabiennale.org/>
- Exhibit at Selbstportrait 2014 (KMG Art Gallery Vienna): <http://www.selfportrait2014.at/>

## PC/Board Memberships

Chair or Co-organizer of Conferences and Workshops

- IFIP ICEC 2016 (general chair): <https://icec2016.cs.univie.ac.at/>
- Nucl.ai conference 2016 (co-organizer): <http://events.nucl.ai/>
- Central European Games Conference 2016 (conference co-chair, chair of edu summit): <http://www.cegconf.com/>
- UniMind Workshop “Next Generation eHealth - Apps, Spiele, Ökosysteme”, 28.1.2016: <http://www.postgraduatecenter.at/unimind/rueckblick/unimind-workshop-next-generation-ehealth/>
- IFIP ICEC 2015 (co-chair and chair of doctoral consortium):
- Nucl.ai conference 2015 (co-chair)
- 15<sup>th</sup> International Conference on Presence (ISPR) 2014 (co-chair): <https://presence2014.univie.ac.at/>
- IFIP Performance 2013 (general chair): <http://performance.cs.univie.ac.at/>
- Energy Efficiency in Large Scale Distributed Systems conference (EE-LSDS 2013), Vienna, Austria, Apr. 22-24 2013. (general chair): <https://www.irit.fr/~Georges.Da-Costa/ee-lsds2013/>
- Vienna GameAI conference 2012 (co-chair)
- YR-RISE Workshop. AAL Forum 2010, Denmark, Odense, 15.-17.09.2010. (co-chair)
- Performance Evaluation of Computer and Communication Systems (Perform 2010), Workshop, October 14-16, 2010, at the University of Vienna (co-chair): <https://cs.univie.ac.at/ec/publikationen/publikation/infpub/3539>
- Young researchers and PhD workshop at the AAL Forum in Austria. Vienna, 29 September 2009. (co-chair)
- International Workshop on Self-Organizing Systems (IWSOS) 2008 (general chair)

Guest Editor of Journals:

- Entertainment Computing (ENTCOM) 14 (2016), special issue on Serious Entertainment. (<http://www.sciencedirect.com/science/journal/18759521> )
- Future Generations Computer Systems 28-5 (2012), special issue on Energy Efficient Distributed Systems, (<http://www.sciencedirect.com/science/article/pii/S0167739X11002342>)
- Springer Annals of Telecommunications, Special Issues on QoE and Socio-Economic Issues of Next Generation Internets (Vol 65, Numbers 1 and 2, 2010).
- Journal of Universal Computer Science (J.UCS) 14-5 (2008), Special Issue: Proceedings of the Workshop on Socio-Economic Aspects of Next Generation Internet 2008.
- Multimedia Tools and Applications

TPC Member/Reviewer of

- FDG 2017
- International Journal of Serious Games
- DroNet 2016, 2017, 2018
- IFIP ICEC 2014, 2015, 2016, 2017, 2018
- Mobile Computing Platforms and Technologies (MCPT) 2015
- Joint Conference on Serious Games (JCSG) 2015, 2016, 2017, 2018
- ECGBL 2016, 2017
- Parallel and Distributed Computing and Networks (PDCN): 2005, 2006, 2007, 2008, 2009, 2010
- Het-Nets: 2005, 2006

- Workshop on Socio-Economic Aspects of Next Generation Internet 2007, 2008
- Intertain 2008, 2009, 2013, 2014, 2015
- European Performance Engineering Workshop (EPEW) 2008, 2009, 2011
- International Conference on Distributed and Intelligent Multimedia Systems (DIMS) 2008
- Future Internet Architectures (future2009) 2009
- International Workshop on Self-Organizing Systems (IWSOS) 2009
- International Conference on Energy Efficient Computing (eEnergy) 2010, 2011
- IFIP Wireless days 2010
- IEEE/ACM International Conference on Green Computing and Communications (GreenCom) 2010
- International Conference on Smart Grid and Home (SGH 2011)
- International Workshop on Sustainable Internet and Internet for Sustainability (SustaInet) 2011, 2012
- 22nd International Conference on Database and Expert Systems Applications (DEXA) 2011
- International Conference on Green Computing (ICGREEN) 2011
- Workshop on Sustainable Networking (SUNSET 2011)
- IEEE International Conference on Computer Science and Information technology (ICCSIT) 2011
- ENERGY 2012, ENERGY2014
- e-Energy 2012
- 4th International Workshop on Story-Telling and Educational Games (STEG'11) 2011
- SMARTGREENS 2012
- ICT-GLOW 2012
- QoEMECS 2012
- IFIP Sustain-IT 2012
- 3rd International ICSE Workshop on Games and Software Engineering 2013
- ICSE GAS 2013
- 22nd International Teletraffic Congress (ITC) Specialist Seminar on Energy Efficient and Green Networking (22<sup>nd</sup> ITC SSEEEN 2013)
- IEEE International Conference on Green Computing and Communications 2013: Storage, Big Data, and Cloud Computing
- IEEE GreenCom 2013 – SBDCC, IEEE GreenCom 2014
- 24th TIWDC 2013

#### Editorial Board Member of

- Gaming Media and Social Effects, Springer book series
- Journal of Universal Computer Science (JUCS)
- International Journal of Mathematical Modelling and Numerical Optimisation (IJMMNO)

#### Regular reviewer for

- Entertainment Computing (Elsevier Journal)
- Multimedia Tools and Applications (Journal)
- Computer Communications (Elsevier Journal)
- Computer Networks (Elsevier Journal)
- J.UCS (Journal)
- EuroNGI/FGI Conference
- IFIP Networking Conference

### Invited Talks

- Austria Innovation Forum 2018 (11.10.2018): Talk about Innovation on Demand - <https://www.austrian-innovation-forum.at/>
- Oberösterreichischen Zukunftsakademie (19.6.2018) - Gamification: Spielen - Lernen - Arbeiten
- Lecture at University of Applied Science Hagenberg about mHealth, apps for behavior change, and medical diaries (14.11.2017).
- Lecture at Hauptverband der Österreichischen Sozialversicherungen (HVB) about mHealth, and apps for behavior change (13.11.2017).
- Janssen Forum (Janssen-Cilag), 12.4.2016, Vienna, Austria
- International Week, Fachhochschule Rotterdam, 10.2.2016
- Subotron Academy (13.11.2015): <http://subotron.com/veranstaltung/playful-science/>

- *Serious Games and Gamification. Computerspiele und Business*, uniMind Lecture an der Wiener Wirtschaftskammer, 14.4.2015:  
<http://www.postgraduatecenter.at/unimind/unimindlectures/lecture-serious-games/>
- *QoE of Mobile and 3D Video*, at SISCom International Research Chair "Future Telecommunication Ecosystems", Rennes, 19.9.2011.
- *Energieeffizienz in verteilten Systemen: Modellierung und Simulation*, Nachrichtentechnisches Kolloquium, 18.5.2010, Vienna, Austria.
- *Energy Saving in Future Home Environments*, Universite Paul Sabatier, IRIT, 25.9.2008.
- *The CODIS Content Delivery Network*, Blekinge Institute of Technology, Karlskrona, Sweden, 31.5.2006.
- *The CODIS Content Delivery Network*, Otto-von-Guericke Universität Magdeburg, Fakultät für Informatik/IWS, 7.7.2005.

## PhD Advisor of

- B. Göbl, Game-supported emotional regulation for adolescents (started 2017)
- J. Grahl, Mobile eye tracking (started 2017)
- A. Hofmann, Gaming technology for handicapped persons. (ongoing)
- K. Peters, Exergames and Sensors (ongoing)
- C. Helf, Serious Games for Fitness (ongoing)
- W. Gaisbauer, Procedural Content Creation (ongoing)
- D. Martinek (ongoing)
- S. Masoumzadeh, Energy efficiency in Cloud datacenters (finished 2018)
- A. Rafetseder, Measuring and Control of digital Networks (finished 2017)
- O. Kothgassner, VR induced stress reactions (co-advisor, together with Univ.-Prof. Dr. Ilse Kryspin-Exner, finished 2017). **Received Bank Austria Research Award (Merit Award) 2018.**
- A. Felnhofer, Presence in Virtual Environments: Examining the Role of Gender and Emotion (co-advisor together with Univ.-Prof. Dr. Ilse Kryspin-Exner, finished 2015). **Received the Dissertation Award of the Austrian Psychological Society 2015 (Österreichische Gesellschaft für Psychologie, ÖGP)**
- F. Metzger, Evaluating Reliable Streaming in Mobile Networks (finished 2015)
- D. Valerio, Mobility patterns derived from mobile phone data (finished 2014)
- M. Imran, Provenance in cloud systems (finished 2014)
- M. Nussbaumer, Self-adaptation of servers (finished 2012)
- B. Klein, A Mobile Community Support System (finished 2012)
- T. Treutner, Energy efficiency in cloud systems (finished 2012)
- R. Weidlich, Energy Efficiency for Home Environments (finished 2010, **received Bank Austria Science Award (Main Award) 2011**)
- S. Buchinger, QoS and QoE of Mobile Video (finished 2010, **received best PhD award at EuroITV 2008, received a Doc.Award 2010 sponsored by the City of Vienna, amongst finalists of GI award 2010**)

## PhD/Habilitation Reviewer

- Zongyi Liu, Self-Adaptive Bandwidth Control for Balanced QoS and Energy Aware Optimization in Wireless Sensor Network, Universite de Toulouse
- Mohamed Abbadi, Casanova 2, a domain specific language for general game development, 2017
- Oliver Hödl, The Design of Technology-Mediated Audience Participation in Live Music, 2016
- Drazen Lucanin, Energy Efficient Cloud Control and Pricing in Geographically Distributed Data Centers, 2016
- Oswald Comber, The influence of developing computer games in secondary schools on computer science competencies, 2016
- Birgit U. Stetina, Review for Habilitation, 2016.
- Dr. Siamak Khatibi, Review for Habilitation, BTH, Sweden, 2014.
- Giuseppe Maggiore, Casanova: a language for game development, Università Ca' Foscari di Venezia, 2013
- Carlos Guerrero, Adaptive fragment designs to reduce the latency of web caching in content aggregation systems, UIB, Palma de Mallorca, 2012.
- Ulrich Engelke, Modelling Perceptual Quality and Visual Saliency for Image and Video Communications, Karlskrona, Sweden, 2010.
- Robert Basmadjan, An Arbitrary Tree-Structured Replica Control Protocol, IRIT, Toulouse, France, 2008.



- Behrooz Rohani Mehdiabadi, Power Control for Mobile Radio Systems Using Perceptual Speech Quality Metrics, University of Western Australia 2007
- W. Garn, Simulation and Optimization of Processes in Telecommunication, TU Vienna, 2005
- A. Halimi, Quality of Service Networking with MPLS, TU Vienna, 2004
- J.H. Schuringa, Mobile Routing Agents deployed in Resilient Packet Networks, TU Vienna, 2004

## Complete List of Publications (Publikationen)

### Ph.D. Dissertation

H. Hlavacs, *Cluster Computing—High Performance Solutions of Problems with Unknown Complexity*. Ph.D. dissertation, Technical University of Vienna, Austria, November 2000.

### Books

G. Wallner, S. Kriglstein, H. Hlavacs, R. Malaka, A. Lugmayr, H.-S. Yang (eds.), *Entertainment Computing – ICEC 2016*, Springer Berlin Heidelberg New York, LNCS 9926, 2016. ISBN 978-3-319-46099-4.

R. Mateus-Berr, H. Hlavacs, A. Lawitschka, M. Nebel, K. Peters (Hrsg.), *Tröstgeschichten*, Eigenverlag Universität für angewandte Kunst Wien, Wien 2015.

Jean-Marc Pierson, Helmut Hlavacs (Eds.), *Proceedings of the COST Action IC0804 on Energy Efficiency in Large Scale Distributed Systems, 2nd Year*, 2011. ISBN: 978-2-917490-18-1 - EAN : 9782917490181

K. Hummel, H. Hlavacs, W. Gansterer (Eds.), Proceedings of the PERFORM 2010 workshop, Springer LNCS (6821), Vienna, Austria, Oct. 14-16 2010.  
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H. Hlavacs, C.W. Ueberhuber, *High-Performance Computers—Hardware, Software, and Performance Simulation*. Frontiers of Simulation, The Society for Computer Simulation Europe, Ghent, 2002.  
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### Book Chapters

H. Hlavacs, *Realität – Virtuell, Erweitert, Reduziert – Reell?* In Transmedialisierung, Winter-Verlag Heidelberg.

H. Hlavacs, *Next Generation mHealth: Games, Apps, Ökosysteme*, in Gesellschaft im Wandel – Gesellschaftliche, wirtschaftliche und ökologische Perspektiven (J. Fritz, N. Tomaschek, Hrsg.), Waxmann Münster, New York, München, Berlin, 2016. ISBN 978-3-8309-3465-3.

J.M. Pierson, H. Hlavacs, *Introduction to energy efficiency in large scale distributed systems*, in Large-Scale Distributed Systems and Energy Efficiency: A holistic view (J.M. Pierson edr.), John Wiley & Sons, Inc., of 111 River Street, Hoboken, NJ, 2015.

S. Brienza, S. Efsun Cebeci, S.-S. Masoumzadeh, H. Hlavacs, Ö. Özkasap, G. Anastasi, *Energy Efficiency in P2P Systems and Applications*, in Large-Scale Distributed Systems and Energy Efficiency: A holistic view (J.M. Pierson edr.), John Wiley & Sons, Inc., of 111 River Street, Hoboken, NJ, 2015.

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S. Buchinger, J. Wippersberg, K. Lojka, K. Macher, W. Robitza, M. Nezveda, P. Hummelbrunner, H. Hlavacs, *Mobile TV Content Design Rules*, in: TV Content Analysis: Techniques and Applications (Y. Kompatsiaris, B. Meriardo, S. Lian, Eds.), CRC Press, Taylor Francis LLC, March 2012.

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### Journal Papers

O. Kothgassner, A. Felnhofer, H. Hlavacs, L. Beutl, I. Krispin-Exner, *Physical presence, social presence and anxiety in participants with social anxiety disorder during virtual cue exposure*, accepted by Cyberpsychology, Behavior, and Social Networking (Cat Ae).

A. Abbasi, D. H. Ting, H. Hlavacs, L. Vale Costa, A. I. Veloso, *An Empirical Validation of a Conceptual Model Predicting Consumer Videogame Engagement Triggered Through Playful-Consumption Experiences*, accepted by Entertainment Computing, Elsevier.

O.D. Kothgassner, A. Goreis, J.X. Kafka, H. Hlavacs, L. Beutl, I. Kryspin-Exner, and A. Felnhofer, *Agency and gender influence older adults' presence-related experiences in an interactive virtual environment*, Cyberpsychology, Behavior, and Social Networking 21-5 (May 2018), pp. 318-324. (Cat Ae)

A. Felnhofer, J.X. Kafka, H. Hlavacs, L. Beutl, I. Kryspin-Exner, O. Kothgassner, *Meeting others virtually in a day-to-day setting: Investigating social avoidance and prosocial behavior towards avatars and agents*, Computers in Human Behavior 80 (March 2018), Elsevier, pp. 399-406. (Cat Ae)

M. Imran, H. Hlavacs, F. Alam Khan, S. Jabeen, F. Gul Khan, S. Shah, M. Alharbi, *Aggregated Provenance and its Implications in Clouds*, Future Generation Computer Systems 81 (April 2018), Elsevier, pp. 348-358. (Cat Ae)

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A. Lugmayr, E. Sutinen, J. Suhonen, Carolina Islas Sendano, H. Hlavacs, *Serious Storytelling and Serious Entertainment – A Survey and Definition*, Multimedia Tools and Applications 76-14 (2017), pp. 15707-15733 (Cat Ae).

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O. D. Kothgassner, M. Griesinger, K. Kettner, K. Wayan, S. Völkl-Kernstock, H. Hlavacs, L. Beutl, A. Felnhofer, *Real-life prosocial behavior decreases after being socially excluded by avatars, not agents*. Computers in Human Behavior 70 (May 2017), pp. 261-269 (Cat Ae).

- F. Kayali, M. Silbernagl, K. Peters, R. Mateus-Berr, A. Reithofer, D. Martinek, A. Lawitschka, and H. Hlavacs, *Design Considerations for a Serious Game for Children after Hematopoietic Stem Cell Transplantation*, Entertainment Computing 15 (2016), Special Issue on Fun and Engaging Computing Technologies for Health, pp. 57-73, Elsevier.
- O.D. Kothgassner, A. Felnhofer, H. Hlavacs, L. Beutl, R. Palme, I. Kryspin-Exner, L.M. Glenk, *Salivary cortisol and cardiovascular reactivity to a public speaking task in a virtual and real-life environment*, Computers in Human Behavior Volume 62 (2016), Elsevier, pp. 124-135. (Cat A)
- C. Helf, H. Hlavacs, *Apps for Life Change: Critical Review and Solution Directions*, Entertainment Computing 14 (2016), Elsevier, pp. 17-22.
- S. Brienza, S. E. Cebeci, S. S. Masoumzadeh, H. Hlavacs, Ö. Özkasap, G. Anastasi, *A Survey of Energy Efficiency in P2P Systems: File Distribution, Content Streaming and Epidemics*, ACM Computing Surveys 48-3 (2015), no. 36, ACM. (Cat A)
- A. Janecek, D. Valerio, K.A. Hummel, F. Ricciato, H. Hlavacs, *The Cellular Network as a Sensor: From Mobile Phone Data to Real-time Road Traffic Monitoring*, IEEE Transactions on Intelligent Transportation Systems 16-5 (2015) (Cat Ae).
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- S. Buchinger, W. Robitza, M. Nezveda, E. Hotop, P. Hummelbrunner, M. C. Sack, H. Hlavacs, *Evaluating Feedback Devices for Time-Continuous Mobile Multimedia Quality Assessment*, Signal Processing: Image Communication 29-9 (2014), pp. 921-934, Elsevier (Cat Ae).
- H. Hlavacs, *Enhancing the Position Estimates of Unmanned Aerial Vehicles by Cooperation*, International Journal of Pervasive Computing and Communications (IJPCC) 10-3 (2014), Emerald Group Publishing.
- A. Felnhofer, O. D. Kothgassner, T. Hetterle, L. Beutl, H. Hlavacs, & I. Kryspin-Exner, *Afraid to be there? Evaluating the relation between presence, self-reported anxiety and heart rate in a virtual public speaking task*, Journal for Cyberpsychology, Behavior, and Social Networking 17-5 (2014), pp. 310–316. (Cat Ae)
- A. Felnhofer, O. D. Kothgassner, N. Hauk, L. Beutl, H. Hlavacs & I. Kryspin-Exner, *Physical and Social Presence in Collaborative Virtual Environments: Exploring age and gender differences with respect to empathy*, Computers in Human Behavior Volume 31, February 2014, pp. 272–279. (Cat Ae)
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- H. Hlavacs, K.A. Hummel, *Cooperative Positioning when using Local Position Information: Theoretical Framework and Error Analysis*, IEEE Transactions on Mobile Computing 12–10 (2013) (Cat Ae)
- B. Klein and H. Hlavacs, *A Socially Aware Caching Mechanism for Encounter Networks*, Telecommunications Systems 51-4 (2012), Springer 2012, pp. 297–304. (Cat Ae)
- H. Hlavacs, R. Weidlich, T. Treutner, *Load-dependent Energy Saving in Future Home Environments*, Telecommunication Systems 51-1 (2012), Springer, 2012, pp. 43–52. (Cat Ae)
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H. Hlavacs, *Modeling Energy Efficiency of File Sharing*, e&i Elektrotechnik und Informationstechnik 11 (2010), Springer, 2010.

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A. Berl, H. de Meer, H. Hlavacs and T. Treutner, *Virtualization in Future Home Environments*, IEEE Communications Magazine 47-12 (2009), pp.62–67. (Cat Ae)

S. Tolic, H. Hlavacs, *A Testbed for P2P Gaming using Time Warp*, Transactions on Edutainment, issue II, Springer, 2009.

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S. Buchinger, H. Hlavacs, *Subjective Quality of Mobile MPEG-4 Videos with Different Frame Rates*, Journal of Mobile Multimedia (JMM) 1-4 (2006), Rinton Press, pp. 327–341. (Ae)

H. Hlavacs, M. Haddad, C. Lafouge, D. Kaplan, J. Ribeiro, *The CODIS Content Delivery Network*, in Computer Networks 48 (2005), Elsevier, pp. 75–89.

H. Hlavacs, *Key Issues of Pervasive Computing*, ÖGAI Journal 23 (2004), pp. 16–23.

G. Haring, H. Hlavacs, K. Hummel, *Performance Issues in Distributed Systems*, Scalable Computing: Practice and Experience (Scientific International Journal for Parallel and Distributed Computing) 4-4, Dec. 2001.

E. Haunschmidt, H. Hlavacs, D.F. Kvasnicka, C.W. Ueberhuber, *Hochleistungsrechnen mit PC-Clustern*, ZID-Line (Informationen des Zentralen Informatikdienstes der Technischen Universität Wien) 3 (2000). In German.

## Peer Reviewed Conference and Workshop Publications

### 2018

V. Stadler, H. Hlavacs, *Blind Adventure - A Game Engine for Blind Game Designers*, Chi Play 2018, Melbourne, Australia, Oct 28-31 2018.

A. Z. Abbasi, D. H. Ting, M. S. Fayyaz, H. Hlavacs, *Modelling Consumers' Observational Learning in Digital Gaming: A Conceptual Model*, Game Days 2018, Darmstadt, Germany, Nov 7-8 2018.

B. Göbl, D. Hristova, S. Jovicic, T. Sluneccko, M.F. Chevron, H. Hlavacs, *Towards a more reflective social media use through serious games and co-design*, Game Days 2018, Darmstadt, Germany, Nov 7-8 2018.

A. Hackl, H. Hlavacs, *Diminishing reality*, International Conference on Entertainment Computing (IFIP-ICEC 2018), Poznan, Poland, Sept. 17-20 2018.

S. Feichter, H. Hlavacs, *Data Reduction of Indoor Point Clouds*, International Conference on Entertainment Computing (IFIP-ICEC 2018), Poznan, Poland, Sept. 17-20 2018.

W. Oliveira, W. Gaisbauer, M. Tizuka, E. Clua, H. Hlavacs, *Mixed Reality Cycling in an Infinite Procedurally Generated City*, International Conference on Entertainment Computing (IFIP-ICEC 2018), Poznan, Poland, Sept. 17-20 2018.

A. Moser, H. Hlavacs, *Learning Supported by Story Templates*, 12th European Conference on Games Based Learning (ECGBL 2018), Sophia Antipolis, France, Oct. 4-5 2018.

A. Moser, H. Hlavacs, *Story Templates - Serious Storytelling to Support Learning*, The 18th IEEE International Conference on Advanced Learning Technologies (ICALT) 2018, Mumbai, July 9.-13 2018.

## 2017

C. Pressler, H. Hlavacs, *Timebender: A Multiplayer Game featuring Bullet Time Mechanics*, 14<sup>th</sup> Conference on Advances in Computer Entertainment (ACE 2017), London, Dec 14-17 2017.

A.Z. Abbasi, D.H. Ting, H. Hlavacs, *Playful-Consumption Experience in Digital Game Playing: A Scale Development*, IFIP ICEC 2017, Tsukuba, Japan, Sept. 18-21 2017.

M. Polzer, H. Hlavacs, *Designing Game-Based Interventions for Subverting Normative Attitudes*, IFIP ICEC 2017, Tsukuba, Japan, Sept. 18-21 2017.

M. Stolze, H. Hlavacs, *Invisible Sound: An app enabling blind people to compose music*, IFIP ICEC 2017, Tsukuba, Japan, Sept. 18-21 2017.

P. Boros, H. Hlavacs, *MuMail - A Simple Multimedia Email Client*, INTETAIN 2017, June 20-21 2017, Funchal, Madeira.

B. Stetina, N. Rodax, A. Klaps, Z. Kovacovsky, S. Sertkan & H. Hlavacs, *Racism and Sexism approached with "Purpose"*, Poster at General Online Research (GOR) 2017, Berlin, March 15-17, 2017.

## 2016

B. Stetina, N. Rodax, A. Klaps, Z. Kovacovsky, S. Sertkan & H. Hlavacs, *"Purpose": Approaching Racism and Sexism within a Survival Serious Game*, Cyberspace 2016, Brno, Czech Republic

M. Stolze, H. Hlavacs, *InvisibleSound: An app enabling blind people to compose music*, Workshop on Game Accessibility at ICEC 2016, Sept 27<sup>th</sup> 2016.

O. Kothgassner, H. Hlavacs, L. Beutl, L. Glenk, R. Palme, A. Felnhofer. *Two experimental virtual paradigms for stress research: Developing avatar-based approaches for inter-personal and evaluative stressors*, 15<sup>th</sup> International Conference on Entertainment Computing (ICEC 2016), Vienna, Austria, Sept. 28-30 2016.

A. Abbasi, T. Hooi, H. Hlavacs. *A Revisit of the Measurements on Engagement in Videogames: A New Scale Development*, short paper at 15<sup>th</sup> International Conference on Entertainment Computing (ICEC 2016), Vienna, Austria, Sept. 28-30 2016.

A. Abbasi, D.T. Hooi, H. Hlavacs, *Proposing a New Conceptual Model Predicting Consumer Videogame Engagement Triggered Through Playful Consumption Experiences*, 15<sup>th</sup> International Conference on Entertainment Computing (ICEC 2016), Vienna, Austria, Sept. 28-30 2016.

S. Masoumzadeh, H. Hlavacs, *A Self-Adaptive Performance-Aware Capacity Controller in Overbooked Datacenters*, International Conference on Cloud and Autonomic Computing (ICCAAC 2016), Augsburg, Germany, Sept. 12-16 2016. **(received Best Paper Award)**

S. Masoumzadeh, H. Hlavacs, *A Gossip-Based Dynamic Virtual Machine Consolidation Strategy for Large-Scale Cloud Data Centers*, International Workshop on Adaptive Resource Management and Scheduling for Cloud Computing (ARMS-CC-2016), July 29, Chicago, USA.

H. Hlavacs, R. Wölfle, K. Peters, D. Martinek, J. Kuczwarra, F. Kayali, A. Reithofer, R. Mateus-Berr, B. Brunmair, S. Lehner, A. Lawitschka, *Usability and Fun of the INTERACCT Client*, EAI International Conference on Games fOr WELL-being (GOWELL 2016), June 14-16 2016, Budapest, Hungary.

S.S. Masoumzadeh, H. Hlavacs, L. Tomas, *A Self-Adaptive Performance Aware Capacity Controller in Overbooked Datacenters*, short paper and poster at 13<sup>th</sup> IEEE International Conference on Autonomic Computing (ICAC 2016), July 19-22 2016, Wuerzburg, Germany.

D. Mirk, A. Janecek, H. Hlavacs, *Towards Single-Failure-Tolerant Multicopters*, 2nd Workshop on Micro Aerial Vehicle Networks, Systems, and Applications for Civilian Use (DroNet 2016), June 26<sup>th</sup> 2016, Singapore.

K. Peters, A. Unterbrunner, D. Martinek, A. Hofmann, H. Hlavacs, *Feasibility of Physiotherapy Exercise Capturing using a Low-Cost Motion Capture System*, 9<sup>th</sup> International Conference on Computer Games and Allied Technologies (CGAT 2016), March 28-29 2016, Singapore.

## 2015

C. Helf, P. Zwickl, H. Hlavacs, P. Reichl, *mHealth Stakeholder Integration: A gamification-based framework-approach towards behavioural change*, The 13<sup>th</sup> International Conference on Advances in Mobile Computing and Multimedia (MoMM 2015), 11 - 13 December 2015, Brussels, Belgium.

B. Göbl, H. Hlavacs, J. Hofer, I. Mueller, H. Muellner, C. Schubert, H. Spallej, C. Rybka and M. Sprung, *MindSpace: Treating Anxiety Disorders in Children with a CBT Game*, Gala Conf 2015, Dec. 9-11 2015, Rome, Italy.

K. Peters, F. Kayali, A. Lawitschka, M. Silbernagl, R. mateus-Berr, D. Martinek, H. Hlavacs, *INTERACCT: Remote Data Entry System with Game-Elements for young Leukaemia Patients*, IEEE Healthcom 2015, Boston, USA, Oct. 14-17 2015.

P. Schwab, H. Hlavacs, *Capturing the Essence: Towards the Automated Generation of Transparent Behavior Models*, Eleventh AAAI Conference on Artificial Intelligence and Interactive Digital Entertainment (AIIDE-15) in Santa Cruz, California, Nov. 16-18 2015.

R. Mateus-Berr, B. Brunmair, H. Hlavacs, F. Kayali, J. Kuczwarra, A. Lawitschka, S. Lehner, D. Martinek, M. Silbernagl, M. Sprung, *Co-Designing Avatars for Children with Cancer*, LearnxDesign 2015, Chicago, USA, June 28-30 2015.

S.S. Masoumzadeh, H. Hlavacs, *Dynamic Virtual Machine Consolidation: A Multi Agent Learning Approach*, IEEE International Conference on Autonomic Computing (ICAC), 7-10 July 2015, Grenoble, France, pp. 161-162.

S.S. Masoumzadeh, H. Hlavacs, *A Cooperative Multi Agent Learning Approach to Manage Physical Host Nodes for Dynamic Consolidation of Virtual Machines*, IEEE 4th Symposium on Network Cloud Computing and Applications (NCCA) 2015, Garching, Munich, June 11-12, 2015.

D. Mirk, H. Hlavacs, *Virtual Tourism with Drones: Experiments and Lag Compensation*, DroNet 2015 - Workshop on Micro Aerial Vehicle Networks, Systems, and Applications for Civilian Use, Florence, Italy, May 18 2015.

P. Schwab, H. Hlavacs, *PALAIS: A 3D Simulation Environment for Artificial Intelligence in Games*, 6th International Symposium on AI & Games, University of Kent, Canterbury, UK, 20th April 2015.

F. Kayali, K. Peters, J. Kuczwarra, A. Reithofer, D. Martinek, R. Wölfle, R. Mateus-Berr, Z. Lehner, M. Silbernagl, M. Sprung, A. Lawitschka, H. Hlavacs, *Participatory Game Design for the INTERACCT Serious Game for Health*, Joint Conference on Serious Games (JCSG) 2015, Huddersfield, UK, 3-4 June 2015.

K. Peters, F. Kayali, A. Reithofer, R. Wölfle, R. Mateus-Berr, J. Kuczwar, Z. Lehner, A. Lawitschka, B. Brunmaier, D. Martinek, M. Silbernagl, H. Hlavacs, *Serious Game Scores as Health Condition Indicator for Cancer Patients*, Medical Informatics Europe (MIE) 2015, Madrid, Spain, May 27.-29 2015.

A. Hofmann, H. Hlavacs, *Gaming and Entertainment Technologies for Includification*, 3rd International Workshop on Virtual and Augmented Assistive Technology (VAAT) at IEEE Virtual Reality 2015, Arles, France, March 23, 2015.

A. Hofmann, H. Hlavacs, *Video Analysis for Includification Requirements*, The 17th International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS 2015), Lisbon, Portugal, Oct 26-28 2015.

B. Göbl, H. Hlavacs, J. Hofer, I. Müller, H. Müllner, C. Schubert, H. H. Spallek, C. Rybka, and M. Sprung, *MindSpace: A Cognitive Behavioral Therapy Game for Treating Anxiety Disorders in Children*, poster at IFIP ICEC 2015, Trondheim, Norway, 30.9.-2.10.2015.

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F. Kayali, K. Peters, A. Reithofer, R. Mateus-Berr, Z. Lehner, D. Martinek, M. Sprung, M. Silbernagl, A. Lawitschka, H. Hlavacs, *A Participatory Game Design Approach for Children After Cancer Treatment*, ACE 2014 workshop on “Designing Systems for Health and Entertainment: what are we missing?”, Funchal, Madeira, 11. Nov. 2014.

R. Mayrhofer, H. Hlavacs and R. D. Findling, *Optimal Derotation of Shared Acceleration Time Series by Determining Relative Spatial Alignment*, 16th International Conference on Information Integration and Web-based Applications & Services (iiWAS 2014), 4-6 Dec 2014, Hanoi, Vietnam. **(received Best Paper Award)** (Cat Be)

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A. Schrammel, H. Hlavacs and M. Sprung, *Mind Book – A Social Network Trainer for Children with Depression*, Games and Learning Alliance Conference (GaLA Conf 2014), Bukarest, July 2-4 2014.

L. Draschkowitz, C. Draschkowitz, H. Hlavacs, *Predicting Shot Success for Table Tennis using Video Analysis and Machine Learning*, 6th International Conference on Intelligent Technologies for Interactive Entertainment (INTETAIN 2014), Chicago, United States. July 9–11, 2014.

F. Kayali, G. Wallner, S. Kriglstein, G. Bauer, D. Martinek, H. Hlavacs, P. Purgathofer and R. Wölfle, *A Case Study of a Learning Game about the Internet*, GameDays 2014, Darmstadt, Germany, April 1-4 2014.

O. D. Kothgassner, J. X. Kafka, J. Rudyk, L. Beutl, H. Hlavacs and A. Felnhofer, *Does social exclusion hurt virtually like it hurts in real life? The role of agency and social presence in the perception and experience of social exclusion*, 15th International Conference on Presence (ISPR 2014), Vienna, Austria, March 17-19 2014. **(received Best Paper Award!)**

A. Felnhofer, T. Hetterle, M. Schmidt, L. Beutl, H. Hlavacs, I. Kryspin-Exner & Kothgassner, *Challenging gender differences in physical presence: Affective states, spatial abilities and presence in a relaxing virtual park*, 15th International Conference on Presence (ISPR 2014), Vienna, Austria, March 17-19 2014.

H. Hlavacs, *Serious Games must look like Casual Games*, Entertainment in Serious Games and Entertaining Serious Purposes Workshop at ICEC2014, 30 Sept. 2014, Sydney, Australia.

S. Buchinger, W. Robitza, M. Nezveda, E. Hotop, P. Hummelbrunner, M. C. Sack, H. Hlavacs, *Evaluating Feedback Devices for Time-Continuous Mobile Multimedia Quality Assessment*, Poster at 6th International Workshop on Quality of Multimedia Experience (QoMEX 2014), Singapore, 18-20 Sept. 2014.

D. Mirk, H. Hlavacs, *Virtual Tourism using Live Streams from Drones*, International Conference on Entertainment Computing (ICEC 2014), 1-3 Oct 2014, Sydney, Australia.

M. Cakmak, H. Hlavacs, *A Need for Interactive Music Videos*, International Conference on Entertainment Computing (ICEC 2014), 1-3 Oct 2014, Sydney, Australia.

K. Peters, F. Kayali, H. Hlavacs, *INTERACCT: Serious Game Performance as Medical Condition Indication*, 25th European Medical Informatics Conference (MIE2014), Istanbul, August 31st – September 3rd, 2014.

D. Mirk, H. Hlavacs, *Using Drones for Virtual Tourism*, 6th International Conference on Intelligent Technologies for Interactive Entertainment (INTETAIN 2014), Chicago, United States, July 9–11, 2014.

W. Kumbeiz, H. Hlavacs, *Bass Impact DJ Studio – A music mixing software with gesture controls*, 6th International Conference on Intelligent Technologies for Interactive Entertainment (INTETAIN 2014), July 9–11, 2014 Chicago, United States.

Lusilla, P., Castellano-Tejedor, C., Helf, C., Zwickl, P., Hlavacs, H., Haukkala, A., & Ravaja, N. *Integrating Motivational Techniques in gamification systems for behaviour change*. Poster communication presented at ICMI 2014 International Conference on Motivational Interviewing. Amsterdam, June 16-18, 2012.

## 2013

H. Hlavacs, *Cooperative Enhancement of Position Accuracy of Unmanned Aerial Vehicles*, 11<sup>th</sup> International Conference on Advances in Mobile Computing & Multimedia (MoMM2013), Vienna, Austria, 2-4 Dec 2013. (Cat Be)

M. Imran, H. Hlavacs, *Searching in Cloud Object Storage by Using a Metadata Model*, The 9th International Conference on Semantics, Knowledge & Grids (SKG2013), Beijing, China, Oct 3-4, 2013. (Cat Be).

Y. Pitrey, H. Hlavacs, *You look blocky, is everything alright? Influence of video distortions on facial expression recognition & quality*, 4th International Workshop on Perceptual Quality of Systems (PQS 2013), Sept 2-4 2013, Vienna, Austria.

W. Robitza, Y. Pitrey, B. Kitzinger, H. Hlavacs, *The NappingPlayer — Projective Mapping Experiments on Android Tablets*, 4th International Workshop on Perceptual Quality of Systems (PQS 2013), Sept 2-4 2013, Vienna, Austria.

M. Schmidt, J. X. Kafka, O. D. Kothgassner, H. Hlavacs, L. Beutl and A. Felnhofer, *Why does it always rain on me? Influence of gender and environmental factors on usability, technology related anxiety and immersion in virtual environments*, 10th International Conference on Advances in Computers Entertainment (ACE 2013), Twente, The Netherlands, Nov. 13-15, 2013.

O. D. Kothgassner, A. Felnhofer, H. Hlavacs, L. Beutl, J. Gomm, N. Hauk, E. Kastenhofer, and I. Kryspin-Exner, *Debunking differences between younger and older adults using a collaborative virtual environment*, 12<sup>th</sup> International Conference on Entertainment Computing (ICEC2013), São Paulo, Brazil, October 16-18 2013. **(received Best Paper Award!)**. (Cat Be)

S.S. Masoumzadeh, H. Hlavacs, *Integrating VM Selection Criteria in Distributed Dynamic VM Consolidation Using Fuzzy Q-Learning*, 7th International DMTF Academic Alliance Workshop on Systems and Virtualization Management: Standards and the Cloud (SVM13), Zurich, Switzerland, Oct. 18<sup>th</sup> 2013.

S.S. Masoumzadeh, H. Hlavacs, *An Intelligent and Adaptive Threshold-Based Schema for Energy and Performance Efficient Dynamic VMs Consolidation*, Energy Efficiency in Large Scale Distributed Systems conference (EE-LSDS 2013), Springer LNCS 8046, Vienna, Austria, 22-24th. April 2013.

M. Imran, H. Hlavacs, *Layering of the Provenance Data for Cloud Computing*, In Proceedings of The 8th International Conference on Grid and Pervasive Computing (GPC 2013), Seoul Olympic Parkhotel, Seoul, Korea, May 9-11, 2013.



Kothgassner, O. D., Felnhofer, A., Glenk, L. M., Beutl, L., Heinzle, A.-K., Gomm, J., Hlavacs, H., Palme, R. & Kryspin-Exner, I. (2013). *Neuroendokrinologische Reaktivität bei einem Vortrag vor einem virtuellem bzw. physisch anwesenden Publikum*. Posterpräsentation am 8. Workshopkongress, 31. Symposium der Fachgruppe für Klinische Psychologie und Psychotherapie, Trier, Deutschland, Mai 9.-11. 2013.

S.S Masoumzadeh, H. Hlavacs, *Intelligent Decision Making in Distributed Dynamic VM Consolidation Using Fuzzy Q-Learning*, Poster at IFIP Performance 2013, Sep. 24-26 2013, Vienna, Austria.

A. Janecek, D. Valerio, K.A.Hummel, F. Ricciato, H. Hlavacs, *Vehicular Traffic Estimation Leveraging Location Area Updates of Mobile Phones*, NetMob 2013, May 1-3, 2013, MIT, USA.

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A. Felnhofer, O. D. Kothgassner, L. Beutl, H. Hlavacs and I. Kryspin-Exner, *Is Virtual Reality made for Men only? Exploring Gender Differences in the Sense of Presence*, International Society for Presence Research Annual Conference – ISPR 2012, Oct. 24 – 26 2012, Philadelphia, Pennsylvania, USA **(received Second Best Paper Award!)**.

D. Valerio, A. Janecek, K. Hummel, H. Hlavacs, F. Ricciato, B. Rainer, *Incident detection from cellular network signaling*, 19<sup>th</sup> ITS World Congress Vienna 2012, 22-26 Oct 2012, Vienna, Austria.

M. Imran, H. Hlavacs, *Applications of Provenance Data for Cloud Infrastructure*, The 8th International Conference on Semantics, Knowledge & Grids (SKG2012), Beijing, China, Oct 22-24, 2012. (Cat Ae)

M. Imran, H. Hlavacs, *Provenance in the Cloud: Why and How?* The Third International Conference on Cloud Computing, GRIDs, and Virtualization (CLOUD COMPUTING 2012), July 22-27, 2012 - Nice, France. (Cat Be) **(received Best Paper Award!)**.

M. Imran, H. Hlavacs, *Provenance Framework for the Cloud Environment (IaaS)*, the Third International Conference on Cloud Computing, GRIDs, and Virtualization (CLOUD COMPUTING 2012), July 22-27, 2012 - Nice, France. (Cat Be)

H. Hlavacs, T. Treutner, *Genetic Algorithms for Energy Efficient Virtualized Data Centers*, 6th International DMTF Academic Alliance Workshop on Systems and Virtualization Management: Standards and the Cloud (SVM12), Las Vegas, Oct. 26, 2012.

Y. Pitrey, M. Barkowsky, R. Pépion, P. Le Callet, H. Hlavacs, *Influence of the source content and encoding configuration on the perceived quality for scalable video coding*, Proceedings of SPIE Human Vision and Electronic Imaging XVII, Vol. 8291 (1), San Francisco, USA. Feb 1-7, 2012.

O. Kothgassner, A. Felnhofer, L. Beutl, H. Hlavacs, M. Lehenbauer, and B. Stetina, *A Virtual Training Tool for Giving Talks*, 11th International Conference on Entertainment Computing, Sept. 26-29 2012, Bremen, Germany. **(Received Best Paper Award!)**

Y. Pitrey, W. Robitza, H. Hlavacs, *Instance Selection Techniques for Subjective Quality of Experience Evaluation*, Third Workshop on Quality of Experience for Multimedia Content Sharing (QoEMCS), Berlin, Germany, July 4th 2012.

A. Janecek, D. Valerio, F. Ricciato, K.A.Hummel, H. Hlavacs, *Cellular Data Meet Vehicular Traffic Theory: Location Area Updates and Cell Transitions for Travel Time Estimation*, 14th International Conference on Ubiquitous Computing (Ubicomp 2012), Pittsburgh, PA, USA on September 5-8, 2012. (Cat Ae)

C. Czepa, S. Buchinger, H. Hlavacs, E. Hotop, Y. Pitrey, *Towards an energy-efficient attention-aware mobile video player with sensor and face detection support*, 1st IEEE WoWMoM Workshop on Video Everywhere, San Francisco, California, USA, June 25, 2012.

H. Hlavacs, L. Beutl, *Simulation of Soft-looking Facial Expressions*, GAMEON Asia 2012, Ritsumeikan University, Kyoto, Japan, February 24-26, 2012 **(received Best Paper Award!)**.

W. Robitza, Y. Pitrey, S. Buchinger, H. Hlavacs, *Made for Mobile: a video database designed for Mobile Television*, Sixth International Workshop on Video Processing and Quality Metrics for Consumer Electronics (VPQM 2012), Scottsdale, Arizona, Jan 19-22, 2012.

Kothgassner, O.D., Felnhofer A., Heinzle, A.-K., Hlavacs, H., Beutl, L., Gomm, J., Glenk, L. & Kryspin-Exner, I. (2012). *Kardiovaskuläre Stressreaktivität während eines virtuellen Redetasks bei gesunden Männern und Frauen*. Posterpräsentation bei der JungwissenschaftlerInnen Posterausstellung an der Fakultät für Psychologie, Österreich, Wien, 25.06.2012 (Poster).

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Kothgassner, O.; Felnhofer, A.; Kastenhofer, E.; Hauk, N.; Gomm, J.; et al, *Das Projekt ICARUS: Information and Communicationstechnology Applications: Research on Useroriented Solutions*, 1. Vernetzungstreffen des ÖPIA Atlas zur Altersforschung, 2012 (Poster).

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H. Hlavacs, L. Beutl, *A simulation for the creation of soft-looking facial expressions*, The ACM 3rd International Symposium on Facial Analysis and Animation (FAA 2012), Sept. 21<sup>st</sup>, Vienna, Austria (Poster + Extended Abstract).

A. Franiak, C. Czepa, H. Hlavacs, Y. Pitrey, *Streaming DirectX-Based Games on Windows*, ACM Advances in Computer Entertainment (ACM ACE 2012) Conference, Nov 3-5 2012, Kathmandu, Nepal (Poster + Extended Abstract).

T. Treutner, H. Hlavacs, *Service Level Management for Iterative Pre-Copy Live Migration*, 8th International Conference on Network and Service Management (CNSM 2012), 22-26 October 2012, Las Vegas, USA (Short Paper).

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H. Hlavacs, T. Treutner, J.-P. Gelas, L. Lefèvre and A.-C. Orgerie, *Energy consumption side-channel attack at Virtual Machines in a Cloud*, International Conference on Cloud and Green Computing (CGC 2011), Sydney, Australia, Dec. 12-14 2011.

B. Klein, H. Hlavacs, *An Effort based Social Diffusion Approach for Mobile Encounter Networks*, Third International Conference on Computational Aspects of Social Networks (CASoN 2011), Salamanca, Spain, Oct. 19-21, 2011.

H. Hlavacs, T. Treutner, *Migration of Virtual Machines: Performance and QoS*, COST Action IC0804 proceedings 2011, ISBN : 978-2-917490-18-1 - EAN : 9782917490181.

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H. Hlavacs, M. Nussbaumer, *Optimization for Multi-Thread Data Flow Software*, 8th European Performance Engineering Workshop (EPEW 2011), Borrowdale, The English Lake District, UK, 12th and 13th October 2011.

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W. Robitza, S. Buchinger, H. Hlavacs, *Impact of Reduced Quality Encoding on Object Identification in Stereoscopic Video*, Quality of Experience for Multimedia Content Sharing (QoEMCS) at EuroITV, Lisbon, Portugal, June 29, 2011.

M. Niedermayer, N. Ali, H. de Meer, H. Hlavacs, T. Treutner, L. Lefevre, J.-P. Gelas and I. Koutsopoulos, *Energy monitoring and its impact on individual user privacy*, 4th Future Internet Cluster Workshop, 2011, Budapest.

M. Lehenbauer, B. Stetina, L. Glenk, O. Kothgassner, A. Felnhofer, H. Hlavacs and I. Kryspin-Exner, *Play and change! Psychological interventions in (serious) games*, Future and Reality of Gaming 2011 (FROG11), Oct. 21-23, 2011, Vienna, Austria.

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R. Weidlich, M. Nussbaumer, H. Hlavacs, *Optimization Towards Consolidation and Throughput for Multi-Thread Software*, 3rd International Symposium on Parallel Architectures, Algorithms and Programming (PAAP'10), Dec 18-20 2010, Dalian, Liaoning, China.

G. da Costa, H. Hlavacs, *Methodology of Measurement for Energy Consumption of Application*, E2GC2: Energy Efficient Grids, Clouds and Clusters Workshop, at IEEE Grid 2010 conference 25-29 October 2010, Brussels, Belgium.

P. Hummelbrunner, S. Buchinger, W. Robitza, D. Selig, M. Nezveda, H. Hlavacs, *Peer to peer Mobile TV recovery system*, EuroITV 2010, Tampere, Finland, June 9-11, 2010.

M. Nezveda, S. Buchinger, W. Robitza, E. Hotop, P. Hummelbrunner, H. Hlavacs, V. Baroncini, C. Delogu, *Test persons for subjective video quality testing: Experts or non-experts?*, QoEMCS Workshop at EuroITV 2010, Tampere, Finland, June 9, 2010.

W. Robitza, S. Buchinger, H. Hlavacs, *Acceptance of Mobile TV Channel Switching Delays*, QoMEX 2010, Trondheim, Norway, June 21-23, 2010.

A. Garcia, R. Weidlich, C. San Leandro, K. Hackbarth, H. Hlavacs, *Approximation towards energy efficient distributed environments*, SimuTools 2010, March 15-19, Malaga, Spain.

M. Sack, S. Buchinger, H. Hlavacs, *Loudness and Auditory masking compensation for Mobile TV*, IEEE International Symposium on Broadband Multimedia Systems and Broadcasting 2010, Shanghai, China, Mar.24-26 2010.

S. Buchinger, W. Robitza, P. Hummelbrunner, M. Nezveda, M. Sack, H. Hlavacs, *Slider or glove? Proposing an alternative quality rating methodology*, Fifth International Workshop on Video Processing and Quality Metrics for Consumer Electronics (VPQM 2010), Scottsdale, Arizona, USA, Jan. 13-15, 2010.

H. Hlavacs, *Energieeffizienz in verteilten Systemen: Modellierung und Simulation*, Nachrichtentechnisches Kolloquium, 18.5.2010, Vienna, Austria.

S. Buchinger, W. Robitza, M. Nezveda, P. Hummelbrunner, H. Hlavacs: *Towards a comparable and reproducible subjective outdoor multimedia quality assessment*. In Third Euro-NF IA.7.5 Workshop on Socio-Economic Issues of Networks of the Future, December, 2010.

S. Buchinger, E. Hotop, W. Robitza, H. Hlavacs, F. D. Simone, T. Ebrahimi, U. Engelke, H-J. Zepernick, M. Fiedler: *Towards a gesture-based video player interface*. In Third Euro-NF IA.7.5 Workshop on Socio-Economic Issues of Networks of the Future, December, 2010.

S. Buchinger, F. De Simone, H. Hlavacs, E. Hotop, T. Ebrahimi, *Gesture and Touch Controlled Video Player Interface for Mobile Devices*, ACM Multimedia 2010 - Human Centered Multimedia Track Short Paper, Firenze, Italy, 2010.

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H. Hlavacs, G. da Costa, J.-M. Pierson, *Energy Consumption of Residential and Professional Switches*, Computational Science and Engineering (CSE) 09, Vancouver, Canada, 2009.

A. Berl, R. Weidlich, M. Schrank, H. Hlavacs, and H. de Meer, *Network Virtualization in Future Home Environments*, International Workshop on Distributed Systems: Operations and Management (DSOM09) 2009.

S. Buchinger, S. Kriglstein, H. Hlavacs, *A Comprehensive View on User Studies: Survey and Open Issues for Mobile TV*, EuroITV 2009, June 3-5, 2009, Leuven, Belgium.

R. Mayrhofer, S. Winkler, H. Hlavacs, M. Affenzeller, and S. Schneider, *On Structural Identification of 2D Regression Functions for In-door Bluetooth Localisation*, 12<sup>th</sup> International Conference on Computer Aided Systems Theory (EuroCAST) 2009, Feb 15-20, 2009, Las Palmas, Gran Canaria, Spain.

S. Buchinger, M. Nezveda, W. Robitza, P. Hummelbrunner, H. Hlavacs, *Mobile TV Coding*, Demo, ConTEL 2009 workshop, June 9, 2009, Zagreb, Croatia.

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S. Tolic, H. Hlavacs, *A Testbed for P2P Gaming using Time Warp*, The Sixth Annual International Conference in Game Design and Technology (GDTW) 2008, Liverpool, UK, Nov. 12-13, 2008.

H. Hlavacs, R. Weidlich, T. Treutner, *Energy Saving in Future Home Environments*, 2nd Home Networking Conference, IFIP Wireless Days, Dubai, Nov. 24-27, 2008.

A. Hess, M. Nussbaumer, H. Hlavacs, K.A. Hummel, *Automatic Adaptation and Analysis of SIP Headers using Decision Trees*, in Principles, Systems and Applications of IP Telecommunications. Services and Security for Next Generation Networks, Second International Conference, IPTComm 2008, Heidelberg, Germany, July 1-2, 2008.

H. Hlavacs, K.A. Hummel, A. Hess, M. Nussbaumer, *Babel-SIP: Self-learning SIP Message Adaptation for Increasing SIP-Compatibility*, 1<sup>st</sup> IEEE Workshop on Automated Network Management, in conjunction with IEEE INFOCOM 2008, Phoenix, Arizona, April 13-18, 2008.

A.E. García, A. Berl, K.A. Hummel, R. Weidlich, K.D. Hackbarth, H. de Meer, H. Hlavacs, A.N. Houyou, *An Economical Cost Model for Fair Resource Sharing in Virtual Home Environments*, in Proceedings of the EuroNGI conference 2008, Krakow, Poland.

S. Buchinger, H. Hlavacs, *QoE von mobilen Multimedia Anwendungen*, IT – und Telecom Symposium 2008, Vienna, Oct. 9-10, 2008. (in German)

S. Buchinger, H. Hlavacs, *A Low Start for Mobile Video Patching*, Workshop on Socio-Economic Issues of NGI 2008, Karlskrona, Sweden, May 27-28 2008.

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H. Hlavacs, K.A. Hummel, R. Weidlich, A. Houyou, A. Berl, H. de Meer, *Energy Efficiency in Future Home Environments: A Distributed Approach*, in Proceedings of the 1<sup>st</sup> Home Networking Conference, Paris, France, Dec. 10-12, 2007.

J. Zottl, W.N. Gansterer, H. Hlavacs, *A Hierarchical Two-Tier Information Management Architecture for Mobile Ad-Hoc Grid Environments*, Proceedings of the 7th IEEE International Symposium on Cluster Computing and the Grid (CCGrid 2007), (B. Schulze, R. Buyya, P. Navaux, W. Cirne, V. Rebello eds.), Rio de Janeiro, Brazil, May 14-17 2007, pp. 702-712.

A.C. Adrowitzer, H. Hlavacs, K.A. Hummel, *Throughput Measurements of IEEE 802.11g-based Ad-hoc Networks in Outdoor Scenarios*, Proceedings 4th International Workshop on Intelligent Transportation (WIT 2007), Hamburg, March 20-21, 2007.

T. Hoehner, M. Petraschek, H. Hlavacs, W. Gansterer, *A Man-in-the-Middle Attack on ZRTP*, Demonstration presented at IPTComm 2007, New York, July 19-20 2007.

H. Hlavacs, W. Gansterer, J. Zottl, M. Petraschek, T. Hoehner, *Enhancing ZRTP by using Computational Puzzles*, Workshop on Socio-Economic Issues of NGI, Santander, June 28-29 2007.

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H. Hlavacs, *A 2D Car Physics Model based on Ackermann Steering*, The Fourth Annual International Conference in Game Design and Technology (GDTW) 2006, Liverpool, UK, Nov. 15-16, 2006.

A. Huber, M. Paulhart, C. Kloiber, H. Hlavacs, *Darwin's Dream*, The Fourth Annual International Conference in Game Design and Technology (GDTW) 2006, Liverpool, UK, Nov. 15-16, 2006.

S. Buchinger, H. Hlavacs, *Influence of the frame rate onto the perceived QoS of small videos*, EuroNGI IA8.6 Workshop on Socio-Economic Aspects of Next Generation Internet, Lyngby, Denmark, Oct. 9-10 2006.

K.A. Hummel, A.C. Adrowitzer, H. Hlavacs, *Measurements of IEEE 802.11g-based Ad-hoc Networks in Motion*, Third EuroNGI Workshop on Wireless and Mobility, Sitges, Spain, June 7-9, 2006.

H. Hlavacs, F. Gelies, D. Blossy, B. Klein, *A Ubiquitous Zoo Guide*, EuroIMSA, Innsbruck, Austria Feb. 2006.

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H. Hlavacs, F. Gelies, D. Blossy, B. Klein, *A Ubiquitous and Interactive Zoo Guide System*, Proceedings of Intelligent Technologies for Interactive Entertainment (INTETAIN) 2005, Madonna di Campiglio, Italy, Nov 30-Dec 2, 2005.

W.N. Gansterer, H. Hlavacs, M. Ilger, P. Lechner, J. Strauß, *Token buckets for outgoing SPAM prevention*, Proceedings of Communication, Network and Information Security (CNIS) 2005, Phoenix, USA, Nov 14-16, 2005.

A. Janecek, H. Hlavacs, *Programming Interactive Real-Time Games over WLAN for Pocket PCs with J2ME and .NET CF*, Proceedings of Netgames 2005, New York, Oct 11-12, 2005.

B. Klein, H. Hlavacs, *Scenarios for Mobile Community Support*, Wireless Systems and Network Architectures in Next Generation Internet: Second International Workshop of the Euro-Ngi Network of Excellence (Matteo Cesana and Luigi Fratta, eds.), Villa Vigoni, Italy, July 13-15, 2005. Springer Berlin Heidelberg (LNCS 3883), May 2006.

B. Klein, H. Hlavacs, *Using Rich Contextual Clues to Support Group Dynamics in Ubiquitous Communities*, European Conference on Computer-Supported Cooperative Work (ECSCW 2005), Paris, France, 2005.

B. Klein, H. Hlavacs, *A Seamless Mobile Community Support System*, Pervasive 2005 Doctoral Colloquium, Munich, Germany, May 2005.

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H. Hlavacs, K.A. Hummel, A. Albl, S. Frandl, J. Kirchler, B. Ilic, *Effects of WLAN QoS Degradation on Streamed MPEG4 Video Quality*, Dagstuhl-Workshop Mobility and Wireless in Euro-NGI, Schloss Dagstuhl, Germany, June 7-9, 2004.

H. Hlavacs, *Content Delivery Improvement by Satellite*, Interworking 2004, Ottawa, Canada, Nov. 29-Dec.1, 2004.

K. Hummel, R. El-Berry, B. Klein, H. Hlavacs, *Tracking Physical and Digital Learning Interactions in Ubiquitous Computing Environments*, 7<sup>th</sup> International Conference on Interactive Computer aided Learning (ICL 2004), Villach, Austria, Sept. 29-Oct. 1, 2004.

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L. Duquerroy, M. Haddad, H. Hlavacs, S. Josset, C. Lafouge, J. Ribeiro, *Bypassing the Internet with the CODIS Content Delivery Network*, in Communication, Network, and Information Security (CNIS 2003), New York, USA, Dec. 10-12, 2003.

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K.A. Hummel, H. Hlavacs, H. Weissenböck, *Web Based Online Learning in Technically Equipped and Mobile Student Societies: A Case Study*. Proceedings of the Interactive Computer Aided Learning (ICL) Workshop 2002, Villach, Austria, 2002.

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H. Hlavacs, G. Haring, *Broadband Wireless Access*, GIT-Fachtagung Breitbandige Zugangstechnologien, Siemens Forum Wien, 14. November 2001. In German.

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