

PERSONAL DETAILS

Address Institute for Interactive Systems and Data Science
Inffeldgasse 16c
Graz University of Technology
8010, Graz, Austria

Tel 0043-316-843-5624

E-Mail jpirker@iicm.edu

Website www.jpinker.com

CURRENT RESEARCH TOPICS

HCI, Intelligent and Interactive Systems, Games Research, AI, Data Analysis, Social Network Analysis, Games User Research, Usability, Virtual Reality, Information Processing and Retrieval

ACADEMIC QUALIFICATIONS

Ph.D. Computer Science 2013-2017

Graz University of Technology, Austria

Supervisors: Christian Guetl, Graz University of Technology, Austria
John Winston Belcher, Department of Physics, Massachusetts Institute of Technology
Thesis Title: Immersive and Engaging Forms of Virtual Learning

Master Thesis 2012-2013

Massachusetts Institute of Technology, US (Visiting Student)

Thesis Title: The Virtual TEAL World Interactive and Collaborative Virtual World Environment for Physics Education

Dipl.Ing. (MSc) Software Development and Business Management 2011-2013

Graz University of Technology, Austria

BSc Software Development and Business Management 2006-2011

Graz University of Technology, Austria

PROFESSIONAL EXPERIENCE

University Assistant Graz University of Technology, Austria

Research and Teaching

2013-present

Software Engineer Austria Forum, Austria

Supervisor: Prof.em. Hermann Maurer

2013-2014

Project Assistant Graz University of Technology, Austria

EC Projects "Alice" and "CBVI"

2010-2012

Quality Assurance Electronic Arts Madrid, Spain

Involved in AAA-titles such as FIFA, Need for Speed, and Dead Space

Summer 2008-2010

AWARDS AND GRANTS

- IGDA Women in Games Ambassador, GDC, San Francisco, 2017
- GOLC Award for Best Visualized Experiment for Maroon, 2017
- Nominated for Prize for Excellent Teaching, TU Graz, Austria 2016 Anita Borg Scholar (by Qualcomm) Scholarship, Grace Hopper Celebration, Tx, Houston, 2016
- Heidelberg Laureate Forum Scholar, Germany, 2016
- Best Paper Award IFIP ICEC, 2016
- Best Paper Award Learning Technology for Education in Cloud, 2016
- Global Game Jam Scholarship to attend GDC, San Francisco, 2016
- QS Reimagine Education Award (Shortlist), Philadelphia, 2016
- OEFG, International Communications Grant, FDG, Pacific Grove, CA, USA, 2015
- ACM-W Scholarship for CSCW 2015, Vancouver, BC, Canada, 2015
- Google Grant for JSConf EU 2014 Berlin, Germany, 2014
- ACM Grant for SIGCSE 2014 New Educators Workshop, Atlanta, US, 2014
- Named Scholarship of the Faculty of Computer Science, Graz University of Technology, 2012
- Named Scholarship Marshall Plan (Austrian Marshall Plan Foundation), 2011-2012

SELECTED CONFERENCE AND EVENT AFFILIATIONS

- Programme Chair, Foundation of Digital Games Conference, 2019
- General Chair, Third International Conference on Game Jams, Hackathons, and Game Creation Events (ACM), 2018
- Special Track Chair, Immersive Learning Research Network Conference, 2016-2018
- Main Organizers, Game Dev Days Graz, 2016-2018
- PC and Reviewing: ACM CHI, ACM SIGCSE, ACM CHI PLAY, IFIP ICEC, CEEC,...

SELECTED TEACHING AND WORKSHOP APPOINTMENTS

- Workshop Gamification for Humanities (Harvard University, MA-US and Humboldt University Berlin, Germany)
- Spring and Summer School Digital Humanities (Georg-August University Gttingen, Germany)
- Social Media Technologies (TU Graz)
- Information Search and Retrieval (TU Graz)
- Game Design and Development (TU Graz)
- Game Design and Development II (TU Graz)
- Applications of innovative Technologies (TU Graz)

SELECTED SPEAKER APPOINTMENTS

- Keynote: Games: The Future of Hollywood at ct-v conference, Austria, 2017
- Panel: How to survive in our industry European Games Executives Summit, Spain, 2017
- Talk: Social Network Analysis in Games and Communities Devcom, Cologne, Germany, 2017
- Talk: Designing Games for The World after Playing Games from the World Quo Vadis Conference, Berlin, Germany, 2017
- Invited Talk: Crossing: Virtual Experiences, Games, and Teaching, SRI International, CA-US, 2016
- Invited Talk: Harvard Ludics Seminar Crossing: Virtual Experiences, Games, and Teaching, Cambridge MA-US, 2015

EDITORIALS

- Beck, D., Allison, C., Morgado, L., Pirker, J., Khosmood, F., Richter, J., & Guetl, C. (Eds.). (2017). Immersive Learning Research Network: Third International Conference, iLRN 2017, Coimbra, Portugal, June 26-29, 2017. Proceedings (Vol. 725). Springer.
- Pena Rios, A. C., Pirker, J., Guetl, C., & Gardner, M. (2016). Special Issue on Immersive Environments: Challenges, Research and New Developments. EAI Endorsed Transactions on Future Intelligent Educational Environments, 2(6).
- Allison, C., Morgado, L., Pirker, J., Beck, D., Richter, J., & Guetl, C. (Eds.). (2016). Immersive Learning Research Network: Second International Conference, iLRN 2016 Santa Barbara, CA, USA, June 27-July 1, 2016 Proceedings (Vol. 621). Springer.
- Ebner, M., Erenli, K., Malaka, R., Pirker, J., & Walsh, A. E. (Eds.). (2015). Immersive Education: 4th European Summit, EiED 2014, Vienna, Austria, November 24-26, 2014, Revised Selected Papers (Vol. 486). Springer.

SELECTED RECENT PUBLICATIONS

- Pirker, J., Lesjak, I., Guetl, C. (2017, July) Maroon VR: A room-scale physics laboratory experience. In The 17th IEEE International Conference on Advanced Learning Technologies ICALT2017, IEEE.
- Pirker, J., Pojer, M., Holzinger, A., Gtl, C. (2017, July) Gesture-based Interactions in Video Games with the Leap Motion Controller, HCI International, Springer.
- Pirker, J., Lesjak, I., P, M., Gtl, C. (2017, March) An Educational Physics Laboratory in Mobile Versus Room Scale Virtual Reality A Comparative Study. In Remote Engineering and Virtual Instrumentation (REV), 2017 13th International Conference on. IEEE.
- Pirker, J., Griesmayr, S., Drachen, A., & Sifa, R. (2016, September) How Playstyles Evolve: Progression Analysis and Proling in Just Cause 2, 15th International Conference on Entertainment Computing.
- Pirker, J., Economou, D., & Gtl, C. (2016, July). Interdisciplinary and International Game Projects for Creative Learning. In Proceedings of the 2016 ACM Conference on Innovation and Technology in Computer Science Education (pp. 29-34). ACM.
- Pirker, J., Economou, D., & Gtl, C. (2016, July). Interdisciplinary and International Game Projects for Creative Learning. In Proceedings of the 2016 ACM Conference on Innovation and Technology in Computer Science Education (pp. 29-34). ACM.

(Full List of Publications available on jpirker.com)

PUBLICATIONS

- [1] Andrews, K., Pirker, J., and Sabol, V. (2014). Future directions for visualisation. *Vis 2014 Workshop on Death of the Desktop - Envisioning Visualization without Desktop Computing*, pages 1–4.
- [2] Beck, D., Allison, C., Morgado, L., Pirker, J., Khosmood, F., Richter, J., and Gütl, C. (2017). Immersive learning research network: Third international conference, ilrn 2017, coimbra, portugal, june 26–29, 2017. proceedings.
- [3] Cheong, C., Filippou, J., Cheong, F., Pirker, J., and Gütl, C. (2016). Using persuasive system design principles to evaluate two next generation digital learning environments. In *International Conference on Interactive Collaborative Learning*, pages 255–268. Springer.
- [4] Fowler, A., Pirker, J., Pollock, I., de Paula, B. C., Echeveste, M. E., and Gómez, M. J. (2016). Understanding the benefits of game jams: Exploring the potential for engaging young learners in stem. In *Proceedings of the 2016 ITiCSE Working Group Reports*, pages 119–135. ACM.
- [5] Gütl, C., Cheong, C., Cheong, F., Chang, V., Nau, S. Z., and Pirker, J. (2015). Expectations of the generation next in higher education: Learning engagement approaches in information sciences subjects. In *Interactive Collaborative Learning (ICL), 2015 International Conference on*, pages 205–214. IEEE.
- [6] Gütl, C. and Pirker, J. (2011). Implementation and evaluation of a collaborative learning, training and networking environment for start-up entrepreneurs in virtual 3d worlds. In *Interactive Collaborative Learning (ICL), 2011 14th International Conference on*, pages 58–66. IEEE.
- [7] Gütl, C., Tomes, L. M., Pirker, J., and Chang, V. (2016). Exploratory and collaborative learning experience in immersive environments. In *Immersive Learning Research Network: Second International Conference, iLRN 2016 Santa Barbara, CA, USA, June 27 – July 1, 2016 Proceedings*, pages 3–16. Springer, Springer International Publishing.
- [8] Hutzler, A., Wagner, R., Pirker, J., and Gütl, C. (2017). Mythhunter: Gamification in an educational location-based scavenger hunt. In *International Conference on Immersive Learning*, pages 155–169. Springer.
- [9] Kunzmann, C., Schmidt, A., and Pirker, J. (2016). Pattern-oriented approaches for design-based research in collaborative research projects: a knowledge maturing perspective. In *Proceedings of the 21st European Conference on Pattern Languages of Programs*, page 19. ACM.
- [10] Morales, M., Amado-Salvatierra, H. R., Hernández, R., Pirker, J., and 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*, pages 139–149. Springer.
- [11] Pena Rios, A., Pirker, J., Christian, G., and Gardner, M. (2016). Preface to the special issue on immersive environments: Challenges, research and new developments. *EAI Endorsed Transactions on Future Intelligent Educational Environments*, 2(6):creators–Pena_Rios.
- [12] Pirker, J. (2013). Master thesis: The virtual teal world—an interactive an collaborative virtual world environment for physics education, graz university of technology.
- [13] Pirker, J., Berger, S., Gütl, C., Belcher, J., and Bailey, P. H. (2012). Understanding physical concepts using an immersive virtual learning environment. *Proceedings of the 2nd European Immersive Education Summit, Paris*, pages 183–191.
- [14] Pirker, J., Economou, D., and Gütl, C. (2016a). Interdisciplinary and international game projects for creative learning. In *Proceedings of the 2016 ACM Conference on Innovation and Technology in Computer Science Education*, pages 29–34. ACM.
- [15] Pirker, J., Griesmayr, S., Drachen, A., and Sifa, R. (2016b). How playstyles evolve: Progression analysis and profiling in just cause 2. In *International Conference on Entertainment Computing*, pages 90–101. Springer.

- [16] Pirker, J. and Gütl, C. (2012). Iterative evaluation of a virtual three-dimensional environment for start-up entrepreneurship in different application scenarios. In *Interactive Collaborative Learning (ICL), 2012 15th International Conference on*, pages 1–6. IEEE.
- [17] Pirker, J. and Gütl, C. (2014). Motivational active learning for computer science education. In *SIGCSE*, page 711.
- [18] Pirker, J. and Gütl, C. (2015a). Educational gamified science simulations. In *Gamification in Education and Business*, pages 253–275. Springer International Publishing.
- [19] Pirker, J. and Gütl, C. (2015b). *Virtual Worlds for 3D Visualizations.*, pages 265–272.
- [20] Pirker, J., Gütl, C., and Astatke, Y. (2015a). Enhancing online and mobile experimentations using gamification strategies. In *2015 3rd Experiment International Conference (exp. at'15)*, pages 224–229. IEEE.
- [21] Pirker, J., Gütl, C., Belcher, J. W., and Bailey, P. H. (2013a). Design and evaluation of a learner-centric immersive virtual learning environment for physics education. In *Human factors in computing and informatics*, pages 551–561. Springer Berlin Heidelberg.
- [22] Pirker, J., Gütl, C., and Kappe, F. (2014a). Collaborative programming exercises in virtual worlds (abstract only). In *Proceedings of the 45th ACM Technical Symposium on Computer Science Education, SIGCSE '14*, pages 719–719, New York, NY, USA. ACM.
- [23] Pirker, J., Gütl, C., and Löffler, J. (2017a). Ptd: Player type design to foster engaging and playful learning experiences. In *Interactive Collaborative Learning (ICL), 2017 International Conference on*, page in press. IEEE.
- [24] Pirker, J., Gütl, C., and Weghofer, P. (2014b). Application scenarios of interactive science fiction prototyping in virtual worlds for education.
- [25] Pirker, J., Gütl, C., Weghofer, P., and Feichtner, V. (2014c). Interactive science fiction prototyping in virtual worlds: Fundamentals and applications. *iJES*, 2(3):46–52.
- [26] Pirker, J., Gütl, C., Weiner, P., and Garcia-Barrios, V. (2015b). Application domains for a location-based mobile application creator. *International Journal of Interactive Mobile Technologies*, 9(3).
- [27] Pirker, J., Gütl, C., Weiner, P., Garcia-Barrios, V. M., and Tomintz, M. (2014d). Location-based mobile application creator creating educational mobile scavenger hunts. In *Interactive Mobile Communication Technologies and Learning (IMCL), 2014 International Conference on*, pages 160–164. IEEE.
- [28] Pirker, J., Holly, M., Hipp, P., Koenig, C., Jeitler, D., and Gütl, C. (2017b). Improving physics education through different immersive and engaging laboratory setups. In *Interactive Mobile Communication Technologies and Learning (IMCL), 2017 International Conference on*, page under review. Springer.
- [29] Pirker, J., Khosmood, F., and Gütl, C. (2017c). Social network analysis of the global game jam network. In *Proceedings of the Second International Conference on Game Jams, Hackathons, and Game Creation Events*, pages 10–14. ACM.
- [30] Pirker, J., Kultima, A., and Gütl, C. (2016c). The value of game prototyping projects for students and industry. In *Proceedings of the International Conference on Game Jams, Hackathons, and Game Creation Events*, pages 54–57. ACM.
- [31] Pirker, J., Lesjak, I., and Gütl, C. (2017d). An educational physics laboratory in mobile versus room scale virtual reality—a comparative study (extended). *International Journal of Online Engineering (iJOE)*, 13(08):106–120.

- [32] Pirker, J., Lesjak, I., and Gütl, C. (2017e). Maroon vr: A room-scale physics laboratory experience. In *2017 IEEE 17th International Conference on Advanced Learning Technologies (ICALT)*, pages 482–484.
- [33] Pirker, J., Lesjak, I., Parger, M., and Gütl, C. (2017f). An educational physics laboratory in mobile versus room scale virtual reality a comparative study. In *Remote Engineering and Virtual Instrumentation (REV), 2017 14th International Conference on*, page in press. IEEE.
- [34] Pirker, J., Pojer, M., Holzinger, A., and Gütl, C. (2017g). Gesture-based interactions in video games with the leap motion controller. In *International Conference on Human-Computer Interaction*, pages 620–633. Springer.
- [35] Pirker, J., Riffnaller-Schiefer, M., and Gütl, C. (2014e). Motivational active learning: Engaging university students in computer science education. In *Proceedings of the 2014 conference on Innovation & technology in computer science education*, pages 297–302. ACM.
- [36] Pirker, J., Riffnaller-Schiefer, M., Tomes, L. M., and Gütl, C. (2016d). Motivational active learning in blended and virtual learning scenarios: Engaging students in digital learning. *Handbook of Research on Engaging Digital Natives in Higher Education Settings*, page 416.
- [37] Pirker, J. and Voll, K. (2015). Group forming processes-experiences and best practice from different game jams. *Workshop Proceedings of the 10th International Conference on the Foundations of Digital Games (Pacific Grove, California, Asilomar Conference Grounds)*.
- [38] Pirker, J., Weghofer, P., and Gütl, C. (2013b). *Science Fiction Prototyping: Flexible Settings in Immersive Environments*. International Conference on Interactive Computer Aided Blended Learning (ICBL).
- [39] Pürcher, P., Höfler, M., Pirker, J., Tomes, L., Ischebeck, A., and Gütl, C. (2016). Individual versus collaborative learning in a virtual world. In *Information and Communication Technology, Electronics and Microelectronics (MIPRO), 2016 39th International Convention on*, pages 824–828. IEEE.
- [40] Rattinger, A., Wallner, G., Drachen, A., Pirker, J., and Sifa, R. (2016). Integrating and inspecting combined behavioral profiling and social network models in destiny. In *International Conference on Entertainment Computing*, pages 77–89. Springer.
- [41] Scherer, R., Müller-Putz, G., Friedrich, E. V., Pammer-Schindler, V., Wilding, K., Keller, S., and Pirker, J. (2015). Games for bci skill learning. *Handbook of Digital Games and Entertainment Technologies*, pages 1–19.
- [42] Settgest, V., Pirker, J., Lontschar, S., Maggale, S., and Gütl, C. (2016). Evaluating experiences in different virtual reality setups. In *International Conference on Entertainment Computing*, pages 115–125. Springer.
- [43] Tomes, L. M., Gütl, C., Pirker, J., and Chang, V. (2015). Exploratory and social learning in 3d virtual worlds. *iLRN 2015 Prague*, page 46.
- [44] Weichhart, G., Pirker, J., Gütl, C., and Stary, C. (2014). 3d progressive education environment for s-bpm. In *International Conference on Subject-Oriented Business Process Management*, pages 188–197. Springer International Publishing.