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# Hannes Högni Vilhjálmsson, Ph.D.

## EDUCATION

- 1997-2003 • PhD in Media Arts and Sciences. Massachusetts Institute of Technology, USA.
- 1995-1997 • MSc in Media Arts and Sciences. Massachusetts Institute of Technology, USA.
- 1991-1994 • BSc in Computer Science. University of Iceland.

## WORK EXPERIENCE

- 2020-Present • **Full Professor, Department of Computer Science, Reykjavik University**
- 2010-2020 • **Associate Professor** (*same*)
- 2006-2010 • **Assistant Professor** (*same*)
  - Leading the Socially Expressive Computing research group (<http://secom.ru.is>).
  - Research in the field of socially intelligent agents and avatars in virtual environments.
  - Teaching includes virtual environments, game technology, AI, language technology and graphics.
- 2013-2016 • **Director of the Center for Analysis and Design of Intelligent Agents (CADIA)**
- 2009-2015 • **Co-Founder and Technology Advisor, MindGames ehf., Reykjavik, Iceland**
  - Advising on and helping with development of innovative game technologies for training mental skills.
- 2006-Present • **Technology Advisor and Board Member (-2014), Alelo Inc., Los Angeles, CA, USA**
- 2005-2006 • **Co-Founder and Chief Technology Officer** (*same*)
  - Spin-off from the "Tactical Language and Culture Training" project at USC.
  - Responsible for technology migration from academic research to a commercial platform.
- 2003-2006 • **Research Scientist, USC Information Sciences Institute, CA, USA.**
  - Member of the Center for Advanced Research in Technology for Education (CARTE).
  - Technical Director on the DARPA "Tactical Language and Culture Training" project.
  - Project lead on the DARPA "BCBM: Believable Communicative Behavior Middleware" project.
  - Guiding graduate students with their research.
- 1995-2003 • **Research Assistant, MIT Media Lab, MA, USA**
  - Member of the Gesture and Narrative Language research group led by Prof. Justine Cassell.
  - Project lead on group projects including "BEAT", "REA" and "Pantomime".
- 1994-1995 • **Senior Software Engineer, Raffind Electronics, Ltd., Reykjavik, Iceland**
  - Developing control and monitoring applications for networked sensors and terminals.
- 1994 • **Software Engineer, Hugmynd Multimedia, Reykjavik, Iceland**
  - Developing a kiosk system for visually browsing a multimedia database of real-estate property.
- 1992-1993 • **Software Engineer, Fjölneymar Inc., Reykjavik, Iceland**
  - Developing on- and off-line visualization and analysis tools for MEDISTOR, a versatile data logger.

# GRANTS and AWARDS

## *Grants Received*

- 2020
- **The Icelandic Student Innovation Fund**
  - Interactive Virtual Student with Programmable Behavioral Problems for Teacher Training in Virtual Reality (Co-PI, 1.800.000 ISK)
  - Data-enhanced Experience of Daylighting in Space and Over Time (Co-PI, 900.000 ISK)
  - The Impact of Learning about Ocean Acidification through Co-presence and Participation in Virtual Reality (Co-PI, 2.700.000 ISK)
  - Improving the User Experience of Remote Communication by Placing the Users in a Three Dimensional Virtual Space (Co-PI, 1.800.000 ISK)
  - Virtual Multilingual Conversational Agent (PI, 900.000 ISK)
  - Teaching and Training Aircraft Mechanics using Augmented Reality (PI, 2.700.000 ISK)
- 2019
- **Technology Development Fund: Vöxtur**
  - Cities that Sustain us 3 (Co-PI, 50.000.000 ISK, 2 Y)
  - **The Icelandic Student Innovation Fund**
  - Personal Product Showcase in Virtual Reality (PI, 900.000 ISK)
  - Simulating the Flow and Experience of Tourists for Planning Better Tourist Infrastructure (Co-PI, 1.800.000 ISK)
- 2018
- **The Icelandic Student Innovation Fund**
  - VR for Training Social Skills for Children Diagnosed with Autism (Co-PI, 2.097.000 ISK)
- 2017
- **The Icelandic Research Fund**
  - Character Territoriality: Social Spatial Reasoning for Digital Actors (PI, 45.000.000 ISK, 3 Y)
  - **Technology Development Fund: Applied Research**
  - Cities that Sustain Us 2: Creating Virtual Futures (PI, 45.000.000 ISK, 3 Y)
- 2016
- **The Icelandic Student Innovation Fund**
  - Inducing Response to Phobias using Virtual Reality (Co-PI, 1.398.000 ISK)
  - Virtual reality as a training tool for special education teachers (Co-PI, 1.398.000 ISK)
  - Automated Discrete Trial Training (PI, 699.000 ISK)
- 2015
- **National Hospital Science Fund (Vísindasjóður Landspítala)**
  - Testing of Game to Teach Surgery Patients about Post-Surgery Pain Management (Co-PI, 1.500.000 ISK)
- 2014
- **The Icelandic Research Fund**
  - Cities that Sustain Us: Using Virtual Reality to Test the Restorative Potential of Future Urban Environments (PI, 30.000.000 ISK, 3 Y)
  - **The Icelandic Student Innovation Fund**
  - The Effects of Leadership on the Visible Social Behaviour of Intelligent Agents (PI, 510.000 ISK)
- 2013
- **The Icelandic Research Fund**
  - Icelandic Language and Culture Training in Virtual Reykjavík (PI, 20.000.000 ISK, 3 Y)
  - **The Icelandic Student Innovation Fund**
  - Optimizing expenditure on cycling roads using cyclists' GPS data (Co-PI, 2.040.000 ISK)
  - Development of a User Modeling System (Co-PI, 1.020.000 ISK)
- 2012
- **The Icelandic Student Innovation Fund**
  - Interactive 3D Social Simulation of Reykjavik Downtown (PI, 1.530.000 ISK)
- 2011
- **The Icelandic Student Innovation Fund**
  - Web Environment for the Deployment and User Testing of Interactive Virtual Agents (PI, 510.000 ISK)
  - Emergent Virtual Stories (PI, 510.000 ISK)

## GRANTS and AWARDS (continued)

- A Mind-Controlled Videogame to Help Children Improve Mental Focus (Co-PI, 510.000 ISK)
  - Labeling the Line: Improving the Mind-Game Feedback Loop in Mind Training Games with Physics and Psychophysics (Co-PI, 510.000 ISK)
- 2010
- **The Icelandic Student Innovation Fund**
  - Autonomous Seat Selection for Virtual Agents (PI, 700.000 ISK)
  - Icelandic Speech Recognition (Co-PI, 480.000 ISK)
- 2009
- **Centre of Excellence**
  - Icelandic Institute for Intelligent Machines (Co-PI, 55.000.000 ISK, 7 Y)
  - **The Icelandic Student Innovation Fund**
  - The Automated Virtual Reading Tutor (Co-PI, 280.000 ISK)
- 2008
- **The Icelandic Research Fund**
  - Humanoid agents in social game environments (Grant of Excellence) (PI, 40.150.000 ISK, 3 Y)
- 2007
- **The Icelandic Research Fund.**
  - Humanoid agents in social game environments (Project Grant) (PI, 4.850.000 ISK, 3 Y)
- 2004
- **The Defense Advanced Research Projects Agency (DARPA)**
  - BCBM: Believable Communicative Behavior Middleware (Co-PI, 700.000 USD, 3 Y)
  - **The National Science Foundation (NSF)**
  - Promoting Competence in Math with Collaboration, Reflection and Role Models (Co-PI, 500.000 USD, 2 Y)

### *Recent Awards and Nominations*

- 2017
- **Recipient of the Reykjavik University Research Award.** Granted for excellence in research.
  - **Nomination for President of Iceland Innovation Award** for "Inducing Response to Phobias using Virtual Reality" by Thordarson, Hafsteinsson and Bjornsson (under my co-supervision)
- 2011
- **Nomination for President of Iceland Innovation Award** for "Mind training games" by Arason, Pourvatan, Voludottir and Nikulasson (under my co-supervision)
- 2011
- **NSN Project of Excellence** for "Autonomous Seat Selection for Virtual Agents" Student Innovation Fund project by Carstensdottir and Gudmundsdottir (under my supervision)
- 2010
- **Nomination for President of Iceland Innovation Award** for "The Automated Virtual Reading Tutor" Student Innovation Fund project by Valgardsson (under my supervision)
- 2009
- **Top 10, Class of Excellence** with "MindGames" in the Innovit Business Plan Competition 2009
- 2008
- **GALA Jury Award** and **GALA Public Award** for the "BML Realizer" student project by Bjarni Þór Árnason and Ægir Þorsteinsson (under my supervision) at the 8th International Conference on Intelligent Virtual Agents, Tokyo, Japan
- 2006
- **Best Paper Nominee** at the 6th International Conference on Intelligent Virtual Agents
- 2005
- **DARPA Significant Technical Achievement Award** for the Tactical Language and Culture Training Project (served as Technical Director on the project)
- 2005
- **DARPA/DARWARS Transition Award** for the Tactical Language and Culture Training Project (for transitioning research into practical use)
- 2005
- **Best Paper Nominee** at the 38th Hawaii International Conference on System Sciences
- 2004
- **Best Paper in Category Award and Best Paper Nominee** at I/ITSEC
- 1998
- **Best Paper Award** at the 2nd International Conference on Autonomous Agents
- 1996
- **Presentation Award** at the 3rd Conference on Lifelike Computer Characters
- 1995
- **Thor Thors Fellowship** from the American-Scandinavian Foundation

## REFEREED PUBLICATIONS

### *Number of Citations by Peers*

- **Google Scholar September 2020** Citations: 5474; Hirsch's h-index: 30;

### *Journal and Conference Articles*

- H. M. Ólafsdóttir, E. Ómarsdóttir, H. Sæland, and H. Vilhjálmsón (2019). "Work in Progress Report: Virtual Courtroom to Prepare Victims of Sex Crimes for Court Proceedings". In ACM International Conference on Intelligent Virtual Agents (IVA '19), July 2–5, 2019, Paris, France. ACM, New York, NY, USA
- A. Thordarson and H. Vilhjálmsón (2019). "SoCueVR: Virtual Reality Game for Social Cue Detection Training". In ACM Int'l Conference on Intelligent Virtual Agents (IVA '19), July 2–5, 2019, Paris, France. ACM, New York, NY, USA,
- B. Sveinbjörnsdóttir, S. Jóhannsson, J. Oddsdóttir, T. Sigurðardóttir, G. Valdimarsson, H. Vilhjálmsón (2019). Virtual Discrete Trial Training for Teacher Trainees. *Journal on Multimodal User Interfaces*. 13:31, Springer.
- P. Lindal, T. Hartig, K. R. Johannsdóttir, H. Vilhjálmsón (2019) "Future cities: Using virtual technology to design restorative residential neighborhoods". International Conference on Environmental Psychology (ICEP) 2019, 4 Sept. – 6 Sept., Plymouth, UK. (Abstract)
- D. Veutgen, A. Ásgeirsdóttir, G. Baldursdóttir, S. Gissurardóttir, G. Guðmundsson, V. Laenen, M. Massetti, J., T. Sigurðardóttir, L. Veroli and H. Vilhjálmsón (2018) "Interpreting Social Commitment in a Simulated Theater" In Proceedings of the 18th International Conference on Intelligent Virtual Agents, Sidney, Australia, November 2018, pp. 289–294.
- C. Pedica and H. Vilhjálmsón (2018) "Study of Nine People in a Hallway: Some Simulation Challenges," in Proceedings of the 18th International Conference on Intelligent Virtual Agents, Sidney, Australia, November 2018, pp. 185–190.
- P. J. Lindal K. R. Jóhannsdóttir, U. Kristjánsson, N. Lensing, A. Stuehmeier, A. Wohlan, and H. Vilhjálmsón (2018) "Comparison of Teleportation and Fixed Track Driving in VR" In Proceedings of the 10th International Conference on Virtual Worlds and Games for Serious Applications, Würzburg, Germany, 2018.
- M. Lárusdóttir, D. Thue, and H. Vilhjálmsón (2018) "User Evaluations of Virtually Experiencing Mount Everest" In Proceedings of the 7th International Working Conference on Human-Centered Software Engineering, Sophia Antipolis, France, 2018.
- B. Sveinbjörnsdóttir, S. Johannson, A. Ingimarsdóttir, and H. Vilhjálmsón, "Teaching Discrete Trial Training in a Virtual Reality Environment," in Proceedings of the ABAI 44th Annual Convention, San Diego, California, USA, 2018.
- B. Bédi, B. Arnbjörnsdóttir, H. Vilhjálmsón. (2017) "Learners' Expectations and Experiences in Virtual Reykjavik". In Proceedings of CALL in Context, University of California, Berkeley, 7-9 July 2017.
- F. A. Friðriksson, H. S. Kristjánsson, D. A. Sigurðsson, D. Thue and H. H. Vilhjálmsón (2016). Become your Avatar: Fast Skeletal Reconstruction from Sparse Data for Fully-tracked VR. In the ACM Eurographics Proceedings of ICAT-EGVE 2016. Arkansas, December 2016 (Demo)
- H. Helgadóttir, S. Jónsdóttir, A. Sigurðsson, S. Schiffel, H. Vilhjálmsón. (2016) Virtual General Game Playing Agent. In the Proceedings of the 16th International Conference on Intelligent Virtual Agents, Los Angeles, September 2016 (Poster)
- A. Cafaro, B. Ravenet, M. Ochs, H. Vilhjálmsón, and C. Pelachaud. (2016) The Effects of Interpersonal Attitude of a Group of Agents on User's Presence and Proxemics Behavior. *ACM Transactions on Interactive Intelligent Systems*, 6:2 (July 2016), pp. 1-33
- A. Cafaro, H. Vilhjálmsón, T. Bickmore. (2016) First Impressions in Human-Agent Virtual Encounters. *ACM Transactions on Computer-Human Interaction* 23:4, Article 24 (August 2016)
- P. Lindal, H. Miri, U. Kristjánsson, K. Johannsdóttir, T. Hartig, H. Vilhjálmsón. (2016) Testing the Restorative Potential of Future Urban Environments Using VR Technology - The Cities that Sustain Us Project. 24th Annual Conference of the International Association for People-Environment Studies (IAPS24), Lund/Alnarp, July 2016
- B. Bédi, B. Arnbjörnsdóttir, H. Vilhjálmsón, H. Helgadóttir, S. Ólafsson, E. Björgvinsson. (2016) Learning Icelandic Language and Culture in Virtual Reykjavik: Starting to Talk. 23rd EUROCALL Conference, Limassol, 24th-27th of August.
- C. Pedica, H. Vilhjálmsón, K. Kristinsson. (2015) Study of Nine People in a Hallway. In Proceedings of the ACM SIGGRAPH Conference Motion in Games, November 16th-18th, 2015, Paris, France (Poster)
- S. Ólafsson, B. Bédi, H. Vilhjálmsón, B. Arnbjörnsdóttir. (2015) Starting a Conversation with Strangers: Explicit Announcement of Presence. In Proceedings of the 3rd European Symposium on Multimodal Communication, September 17th-18th 2015, Dublin, Ireland (Abstract)

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- P. J. Lindal, H. Miri, K. R. Johannsdottir, T. Hartig, H. Vilhjalmsson. (2015) Cities that Sustain Us: Using Virtual Reality to Test the Restorative Potential of Future Urban Environments. In Proceedings of the 11th Biennial Conference on Environmental Psychology, August 24th-26th 2015, Groningen, The Netherlands (Abstract)
- C. Oliva and H. Vilhjalmsson. (2014) "Prediction in Social Path Following". In Proceedings of the ACM SIGGRAPH Conference on Motion in Games, November 6-8, Los Angeles, CA.
- A. Cafaro, H. Vilhjalmsson, T. Bickmore, D. Heylen, C. Pelachaud (2014) "Representing Communicative Functions in SAIBA with a Unified Function Markup Language". In Proceedings of the 14th International Conference on Intelligent Virtual Agents, August 27-29, Boston, MA, Lecture Notes in Artificial Intelligence, 8637:81-94, 2014, Springer International Publishing Switzerland
- A. Cafaro, H. Vilhjalmsson, T. Bickmore, D. Heylen, D. Schulman (2013) "First Impressions in User-Agent Encounters: The Impact of an Agent's Nonverbal Behavior on Users' Relational Decisions", in Proceedings of the 12th International Conference on Autonomous Agents and Multiagent Systems (AAMAS), Saint Paul, MN, USA. May 2013.
- A. Cafaro, H. Vilhjalmsson, T. Bickmore, D. Heylen, K. Jóhannsdóttir and G. Valgarðsson (2012) "First Impressions: Users' Judgments of Virtual Agents' Personality and Interpersonal Attitude in First Encounters", in Proceedings of the 12th International Conference on Intelligent Virtual Agents, September 12-14, Santa Cruz, CA, Lecture Notes in Computer Science, 2012, Springer-Verlag, Berlin Heidelberg
- Pedica, C. and Vilhjalmsson, H. (2012), "Lifelike Virtual Characters using Behavior Trees for Social Territorial Intelligence"(poster) in Proceedings of ACM SIGGRAPH 2012. Los Angeles, August 5-9.
- J. Guðnason, O. Kjartansson, J. Jóhannsson, E. Carstensdóttir, H. Vilhjalmsson, H. Loftsson, S. Helgadóttir, K. Jóhannsdóttir and E. Rögnvaldsson (2012), "Almannaromur: An Open Icelandic Speech Corpus", in Proceedings of the Third International Workshop on Spoken Language Technologies for Under-resourced languages (SLTU 2012). Cape Town, South Africa
- Carstensdóttir, E., Gudmundsdóttir, K., Valgardsson, G. and Vilhjalmsson, H. (2011), "Where to Sit? The Study and Implementation of Seat Selection in Public Places", H. Vilhjalmsson (Eds.): Proceedings of the 11th International Conference on Intelligent Virtual Agents, September 15-17, Reykjavik, Iceland, *Lecture Notes in Computer Science*, **6895**:473-474, Springer-Verlag, Berlin Heidelberg
- Thrainsson, P. R., Petursson, A. L. and Vilhjalmsson, H. (2011) "Dynamic Planning for Agents in Games Using Social Norms and Emotions", H. Vilhjalmsson (Eds.): Proceedings of the 11th International Conference on Intelligent Virtual Agents, September 15-17, Reykjavik, Iceland, *Lecture Notes in Computer Science*, **6895**:473-474, Springer-Verlag, Berlin Heidelberg (Poster)
- Koutsombogera, M., Ammendrup, S. M., Vilhjalmsson, H. and Papageorgiou, H. (2011), "Nonverbal Expression of Turn Management in TV Interviews: A Cross-Cultural Study between Greek and Icelandic" in A. Esposito et al. (Eds.): COST 2102 Int. Training School 2010, *Lecture Notes in Computer Science* 6456:207-213, Springer-Verlag Berlin Heidelberg 2010
- Pedica, C. and Vilhjalmsson, H. (2010) "Spontaneous Avatar Behavior for Human Territoriality" in *Journal of Applied Artificial Intelligence*, Volume 24 Issue 6, July 2010, 575-593 Taylor and Francis, Inc. Bristol, PA, USA
- Pedica, C., Vilhjalmsson, H. and Larusdóttir, M. (2010) "Avatars in Conversation: The Importance of Simulating Territorial Behavior" in Albeck et al. (Eds.): Proceedings of the 10th International Conference on Intelligent Virtual Agents, September 20-22, Philadelphia, PA. *Lecture Notes in Computer Science*, 2010, 6356: 336-342, Springer-Verlag, Berlin Heidelberg
- Pedica, C. and Vilhjalmsson, H. (2009) "Spontaneous Avatar Behavior for Human Territoriality", Zs. Ruttkay et al. (Eds.): Proceedings of the 9th International Conference on Intelligent Virtual Agents, September 14-16, Amsterdam, The Netherlands, *Lecture Notes in Artificial Intelligence*, **5773**: 344-357, Springer-Verlag, Berlin Heidelberg
- Cafaro, A., Gaito, R. and Vilhjalmsson, H. (2009) "Animating Idle Gaze in Public Places", Zs. Ruttkay et al. (Eds.): Proceedings of the 9th International Conference on Intelligent Virtual Agents, September 14-16, Amsterdam, The Netherlands, *Lecture Notes in Artificial Intelligence*, **5773**: 250-256, Springer-Verlag, Berlin Heidelberg
- Pedica, C. and Vilhjalmsson, H. (2008) "Social Perception and Steering for Online Avatars", H. Prendinger et al. (Eds.): Proceedings of the 8th International Conference on Intelligent Virtual Agents, September 1-3, Tokyo, Japan, *Lecture Notes in Artificial Intelligence*, **5208**: 104-116, Springer-Verlag, Berlin Heidelberg
- Heylen, D., Kopp, S., Marsella, S., Pelachaud, C., Vilhjalmsson, H. (2008) "The Next Step Towards a Functional Markup Language", H. Prendinger et al. (Eds.): Proceedings of the 8th International Conference on Intelligent Virtual Agents, September 1-3, Tokyo, Japan, *Lecture Notes in Artificial Intelligence*, **5208**: 270-280, Springer-Verlag, Berlin Heidelberg

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- Vilhjalmsson, H., Cantelmo, N., Cassell, J., Chafai, N., Kipp, M., Kopp, S., Mancini, M., Marsella, S., Marshall A., Pelachaud, C., Ruttkay Z., Thorisson, K., van Welbergen, H. and van der Werf, R. (2007) "The Behavior Markup Language: Recent Developments and Challenges", C. Pelachaud et al. (Eds.): Proceedings of The 7th International Conference on Intelligent Virtual Agents, September 17-19, Paris, France, *Lecture Notes in Artificial Intelligence*, **4722**: 99-111, Springer-Verlag, Berlin Heidelberg
- Vilhjalmsson, H., Merchant, C., Samtani, P. (2007) "Social Puppets: Towards Modular Social Animation for Agents and Avatars", D. Schuler (Ed.): Proceedings of The 2nd International Conference on Online Communities and Social Computing, July 22-27, Beijing, China, *Lecture Notes in Computer Science*, **4564**:192-201, Springer-Verlag, Berlin Heidelberg *Invited Paper*
- Kopp, S., Krenn, B., Marsella, S., Marshall, A. N., Pelachaud, C., Pirker, H., Thorisson, K. and Vilhjalmsson, H. (2006) "Towards a Common Framework for Multimodal Generation in ECAs: The Behavior Markup Language", J. Gratch et al. (Eds.): Proceedings of The 6th International Conference on Intelligent Virtual Agents, August 21-23, Marina del Rey, CA, USA, *Lecture Notes in Computer Science*, **4133**: 205-217, Springer-Verlag, Berlin Heidelberg
- Thorisson, K., Vilhjalmsson, H., Pelachaud, C., Kopp, S., Badler, N., Johnson, W. L., Marsella, S. and Krenn, B. (2006) "Representations for Multimodal Generation: A Workshop Report", *AI Magazine*, **27**(1), AAAI Press
- Valente, A., Johnson, W. L. and Vilhjalmsson, H. (2006) "The Tactical Language and Culture Training System: A Demonstration", *21st National Conference on Artificial Intelligence*, July 16-20, Boston, MA, AAAI
- Johnson, W. L., Vilhjalmsson, H. and Marsella, S. (2005) "Serious Games for Language Learning: How Much Game, How Much AI?", in *Proceedings of The 12th International Conference on Artificial Intelligence in Education*, July 18-22, Amsterdam, The Netherlands, IOS Press
- Vilhjalmsson, H. and Samtani, P. (2005) "MissionEngine: Multi-system integration using Python in the Tactical Language Project", *PyCon*, March 23-25, Washington, D.C., Python Software Foundation
- Vilhjalmsson, H. (2005) "Augmenting Online Conversation through Automatic Discourse Tagging", in *Proceedings of The 6th Annual Minitrack on Persistent Conversation at HICSS*, January 3-6, 2005, Big Island, Hawaii, IEEE
- Warwick, W. and Vilhjalmsson, H. (2005) "Engendering Believable Communicative Behaviors in Synthetic Entities for Tactical Language Training: An Interim Report", in *Proceedings of Behavior Representation in Modeling and Simulation*, May 16-19, Universal City, CA, SISO
- Johnson, W. L., Beal, C., Fowles-Winkler, A., Lauper, U., Marsella, S., Narayanan, S. and Vilhjalmsson, H. (2004) "Tactical Language Training System: An Interim Report", in *Proceedings of The International Conference on Intelligent Tutoring Systems*, August 30 - September 3, Maceio, Brasil, Springer-Verlag
- Beal, C., Shaw, E., Chui, Y., Lee, H., Vilhjalmsson, H. and Qu, L. (2005) "Enhancing ITS instruction with integrated assessments of learner mood, motivation and gender", *12 International Conference on Artificial Intelligence in Education*, July 18-22, IOS Press
- Johnson, W. L., Vilhjalmsson, H. and Samtani, P. (2005) "The Tactical Language Training System: Demonstration", *Artificial Intelligence and Interactive Digital Entertainment*, June 1-3, Marina del Rey, CA
- Johnson, W. L., Choi, S., Marsella, S., Mote, N., Narayanan, S. and Vilhjalmsson, H. (2004) "Tactical Language Training System: Supporting the Rapid Acquisition of Foreign Language and Cultural Skills", in *Proceedings of NLP and Speech Technologies in Advanced Language Learning Systems*, June 17-19, Venice, Italy, inSTIL
- Johnson, W. L., Marsella, S. and Vilhjalmsson, H. (2004) "The DARWARS Tactical Language Training System", in *Proceedings of The Interservice/Industry Training, Simulation and Education Conference*, November 26-29, Orlando, FL, USA, SSA
- Vilhjalmsson, H. (2004) "Animating Conversation in Online Games", Rauterberg, M. (Ed.), Proceedings of The 3rd International Conference on Entertainment Computing, *Lecture Notes in Computer Science*, **3166**: 139-150, Springer-Verlag, Berlin Heidelberg
- O'Sullivan, C., Cassell, J., Vilhjalmsson, H., Dingliana, J., Dobbyn, S., McNamee, B., Peters, C. and Giang, T. (2002) "Levels of Detail for Crowds and Groups", *Computer Graphics Forum*, **21**(4), EG
- Cassell, J., Stocky, T., Bickmore, T., Gao, Y., Nakano, Y., Ryokai, K., Tversky, D., Vaucelle, C. and Vilhjalmsson, H. (2002) "MACK: Medialab Autonomous Conversational Kiosk", in *Proceedings of IMAGINA*, February 12-14, Monte Carlo, Monaco
- Cassell, J., Bickmore, T., Campbell, L., Vilhjalmsson, H. and Yan, H. (2001) "More than just a pretty face: conversational protocols and the affordances of embodiment", *Knowledge-Based Systems*, **14**, Elsevier
- Cassell, J., Vilhjalmsson, H. and Bickmore, T. (2001) "BEAT: the Behavior Expression Animation Toolkit", *ACM SIGGRAPH*, August 12-17, Los Angeles, CA, ACM Press, 477-486

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- Cassell, J., Ananny, M., Basu, A., Bickmore, T., Chong, P., Mellis, D., Ryokai, K., Smith, J., Vilhjálmsón, H. and Yan, H. (2000) "Shared Reality: Physical Collaboration with a Virtual Peer", *ACM CHI*, April 1-6, The Hague, The Netherlands, ACM Press
- Cassell, J., Bickmore, T., Vilhjálmsón, H. and Yan, H. (2000) "More Than Just a Pretty Face: Affordances of Embodiment", *International Conference on Intelligent User Interfaces*, January 9-12, New Orleans, LA, ACM Press, 4-9
- Cassell, J. and Vilhjálmsón, H. (1999) "Fully Embodied Conversational Avatars: Making Communicative Behaviors Autonomous", *Autonomous Agents and Multi-Agent Systems*, **2**(1), ACM Press
- Cassell, J., Vilhjálmsón, H., Chang, K., Bickmore, T., Campbell, L. and Yan, H. (1999) "Requirements for an Architecture for Embodied Conversational Characters", *Computer Animation and Simulation*, Magnenat-Thalmann, N. and Thalmann, D. (Eds.), Springer Verlag, Vienna, Austria
- Cassell, J., Bickmore, T., Billinghamurst, M., Campbell, L., Chang, K., Vilhjálmsón, H. and Yan, H. (1999) Embodiment in Conversational Interfaces: Rea", *CHI*, Pittsburgh, PA, ACM Press, 520-527
- Vilhjálmsón, H. and Cassell, J. (1998) "BodyChat: Autonomous Communicative Behaviors in Avatars", *Autonomous Agents*, Autonomous Agents, Minneapolis, MN, ACM Press, 269-276

### Workshop Papers

- P. Alves-Oliveira, M. Foster, H. Gunes, S. Höhn, F. Kirstein, A. Marrella, M. Neerincx, M. Okada, A. Paiva, E. Sklar, H. Vilhjálmsón, (2020) "Working Group on Scenarios for Human-Agent and Human-Robot Groups" in *Dagstuhl Reports: Social Agents for Teamwork and Group Interactions (Dagstuhl Seminar 19411)*, E. André, A. Paiva, J. Shah and S. Šabanovic (Eds.) **9**(10), 37-41, Schloss Dagstuhl–Leibniz-Zentrum fuer Informatik
- E. André, D. Heylen, J. Kennedy, A. Paiva, C. Pelachaud, H. Vilhjálmsón, (2020) "Working Group on Social Behaviours for Group Interactions between Humans and Social Agents and Robots" in *Dagstuhl Reports: Social Agents for Teamwork and Group Interactions (Dagstuhl Seminar 19411)*, E. André, A. Paiva, J. Shah and S. Šabanovic (Eds.) **9**(10), 42-45, Schloss Dagstuhl–Leibniz-Zentrum fuer Informatik
- H. Vilhjálmsón, "When a Virtual Agent is a Flawed Stimulus" In Proceedings of the 1st Workshop on Methodology and/of Evaluation of IVAs, Sidney, Australia, 2018.
- J. Oddsdóttir, T. Sigurðardóttir, K. Jóhannsdóttir, B. Sveinbjörnsdóttir, H. Vilhjálmsón. (2016) Virtual Training for Discrete Trial Trainers. In the Proceedings of the Workshop on Graphical and Robotic Embodied Agents for Therapeutic Systems (GREATS16) at the 16th International Conference on Intelligent Virtual Agents, Los Angeles, September 2016
- H. Vilhjálmsón, E. Björgvinsson, H. Helgadóttir, K. Kristinsson, S. Ólafsson. (2014) "We Never Stop Behaving: The Challenge of Specifying and Integrating Continuous Behavior". In Proceedings of the Workshop on Architectures and Standards for IVAs at the 14th International Conference on Intelligent Virtual Agents, August 27-29, Boston, MA
- A. Cafaro and H. Vilhjálmsón. (2014) "First Impressions in Human-Agent Virtual Encounters". Poster at the London Virtual Social Interaction Workshop, UCL Institute of Cognitive Neuroscience, September 4-5, London UK
- Thórisson, K.R. and Vilhjálmsón, H. (2009) "Functional Description of Multimodal Acts: A Proposal" in the proceedings of the 2nd Function Markup Language Workshop "Towards a Standard markup Language for Embodied Dialogue Acts" at AAMAS, Budapest, Hungary, 2009
- Vilhjálmsón, H. and Thórisson, K.R (2008) "A Brief History of Function Representation from Gandalf to SAIBA" in the proceedings of the 1st Function Markup Language Workshop at AAMAS, Portugal, June 12-16, 2008
- Vilhjálmsón, H. and Stacy, M. (2005) "Social Performance Framework", *Workshop on Modular Construction of Human-Like Intelligence at the 20th National AAAI Conference on Artificial Intelligence*, July 9th, Pittsburgh, PA, AAAI
- Johnson, W. L., Marsella, S., Mote, N., Si, M., Vilhjálmsón, H. and Wu, S. (2004) "Balanced Perception and Action in the Tactical Language Training System", *Workshop on Balanced Perception and Action in ECAs in conjunction with AAMAS*, July 19-20, New York, NY
- O'Sullivan, C., Cassell, J., Vilhjálmsón, H., Dobbyn, S., Peters, C., Leeson, W., Giang, T. and Dingliana, J. (2002) "Crowd and Group Simulation with Levels of Detail for Geometry, Motion and Conversational Behavior", *Eurographics-Irish Chapter Workshop on Computer Graphics*, March 25-26, Dublin, Ireland, EG
- Vilhjálmsón, H. (1999) "Identity, Avatars and Embodiment",
- Cassell, J., Bickmore, T., Billinghamurst, M., Campbell, L., Chang, K., Vilhjálmsón, H. and Yan, H. (1998) "An Architecture for Embodied Conversational Characters", *First Workshop on Embodied Conversational Characters*, October 12-15, Tahoe City, CA

## REFEREED PUBLICATIONS (continued)

- Vilhjálmsón, H. (1996) "Autonomous Communicative Behaviors in Avatars", *Lifelike Computer Characters*, October 8-11, Snowbird, UT

### *Book Chapters and Other Publications*

- Vilhjálmsón, H. (2014), "Automation of Avatar Behavior" in Tanenbaum, J., el-Nasr, M. S. and Nixon M. (Eds.): *Non-Verbal Communications in Virtual Worlds*. ETC Press (Carnegie Mellon University).
- Vilhjálmsón, H. (2009) "Representing Communicative Function and Behavior in Multimodal Communication" in A. Esposito et al. (Eds.): *Multimodal Signals: Cognitive and Algorithmic Issues. Lecture Notes in Artificial Intelligence*, **5398**: 47-59, Springer-Verlag, Berlin Heidelberg
- Vilhjálmsón, H. (2008) "Tölvuleikir teknir alvarlega vestanhafs", *Tölvumál: The Journal of the Society for Information Processing*, **33**(1), Skýrslutæknifélag Íslands
- Cassell, J., Vilhjálmsón, H. and Bickmore, T. (2004) "BEAT: The Behavior Expression Animation Toolkit", *Life-Like Characters: Tools, Affective Functions, and Applications*, Prendinger, H. and Ishizuka, M. (Eds.), Springer-Verlag, Berlin, 163-185
- Cassell, J., Bickmore, T., Campbell, L., Vilhjálmsón, H., Yan, H. (1999) "Conversation as a System Framework: Designing Embodied Conversational Agents", *Embodied Conversational Agents*, Cassell, J. et al. (Eds.), MIT Press, Cambridge, MA, 29-63
- Vilhjálmsón, H. (1993) "Sýndarveruleiki", *Tölvumál: The Journal of the Society for Information Processing*, **18**(3), Skýrslutæknifélag Íslands

## SERVICE

### *Coordination Work*

- General Steering Committee Chair *ACM Conference on Intelligent Virtual Agents*, 2018-present
- General Steering Committee Member *International Conference on Intelligent Virtual Agents*, 2009-2017
- Program Co-Chair for *ACM Conference on Intelligent Virtual Agents 2020*, Glasgow, UK, September 2020
- Senior PC Member for *International Conference on Autonomous Agents and Multi-Agent Systems*, 2018, 2020
- Co-chair, National Symposium on The Many Faces of Pain. Reykjavik, Iceland. September 1st – 3rd., 2017
- Senior PC Member for *ACM International Conference on Multimodal Interaction*, 2016, 2017
- Senior PC Member for *International Conference on Intelligent Virtual Agents*, 2010, 2012, 2013, 2014, 2015, 2017, 2019
- Co-Chair, Virtual Agent Track *International Conference on Autonomous Agents and Multi-Agent Systems*, 2016
- Co-Chair, Doctoral-Consortium *International Conference on Intelligent Virtual Agents*, 2015
- Co-Chair, *ANIREY: Democratize Animation*, Nordic Workshop, 2015
- Senior PC Member for *International Conference on Autonomous Agents and Multiagent Systems*, 2010, 2011, 2014, 2015
- Co-Producer for the *Icelandic AI Festival*, Reykjavik University, Reykjavik, October 2014
- Chair *11th International Conference on Intelligent Virtual Agents*, Reykjavik, Iceland, September 2011
- Co-chair for *6th Nordic Conference on Human-Computer Interaction*, Reykjavik, Iceland, October 2010
- Co-chair for *The 9th International Conference on Intelligent Virtual Agents*, Amsterdam, The Netherlands, September 2009
- Co-organizer *The 4th International Workshop on the Behavior Markup Language*, Amsterdam, The Netherlands, September 2009
- Co-organizer of the *Annual Conference on Software Development*, The Icelandic Society for Information Processing (Ský), Reykjavik, November 2008
- Producer for the *Icelandic AI Festival*, Reykjavik University, Reykjavik, November 2008
- Co-organizer of *The 3rd International Workshop on the Behavior Markup Language*, MITRE Corporation, Boston, MA, June 2-3, 2008
- Co-organizer of *The 1st Functional Markup Language Workshop* at AAMAS 2008, Estoril, Portugal, May 12-13, 2008
- Interactive Demonstrations Chair for *the 13th International Conference on Artificial Intelligence in Education*, Marina del Rey, CA, July 2007



## SERVICE (continued)

- Co-organizer of *The 2nd International Workshop on the Behavior Markup Language*, Paris, France, June 7-8, 2007
- Co-organizer of an *International Workshop on Multimodal Behavior Description*, Vienna, Austria, November 6-8, 2006
- Co-organizer of a AAAI Workshop on *Modular Construction of Human-Like Intelligence*, Pittsburgh, Pennsylvania, July 10, 2005.
- Co-organizer of an *International Workshop on Representations for Multimodal Generation*, Reykjavík, Iceland, April 23-25, 2005.
- Co-organizer of a Workshop on *Embodied conversational agents* at ACM AAMAS, 2002

### *Most Recent Referee Work*

- **2020** *Journal on Multi-Modal User Interfaces, CDIO, NordiCHI, PLOS ONE*
- **2019** *Journal on Multi-Modal User Interfaces, International Journal of Artificial Intelligence in Education, Multimodal Technologies and Interaction, ACM Transactions on Graphics, SIGGRAPH 2019, Transactions on Affective Computing*
- **2018** *IEEE Transactions on Visualization and Computer Graphics, International Journal on AI in Education, IEEE International conference on Artificial Intelligence and Virtual Reality (AIVR)*
- **2017** *IEEE Virtual Reality 2017, ACM Autonomous Agents and Multi-Agent Systems (AAMAS 2017), Intelligent Virtual Agents (IVA 2017) (Meta Reviewer), International Conference on Multimodal Interaction (ICMI 2017) (Meta Reviewer), International Joint Conference on Artificial Intelligence (IJCAI 2017), Workshop on Conversational Interruptions in Human-Agent Interaction at IVA 2017 (CIHAI)*
- **2016** *Journal on Multi-Modal User Interfaces, Transactions on Computational Intelligence and AI in Games, Autonomous Agents and Multi-Agent Systems (AAMAS 2016) (Co-Chair of VA Track), Intelligent Virtual Agents (IVA 2016)*
- **2015** *Journal on Multimodal User Interfaces, Perceptual and Motor Skills Journal, Transactions on Computational Intelligence and AI in Games, IEEE's Transactions on Visualization and Computer Graphics, Autonomous Agents and Multi-Agent Systems (AAMAS 2015) (Senior PC), Intelligent Virtual Agents (IVA 2015) (DC Co-Chair, Best Paper Award)*
- **2014** *IEEE's Transactions on Visualization and Computer Graphics, International Conference on Computer Graphics Theory and Applications (GRAPP 2014), Intelligent Virtual Agents (IVA 2014) (Senior PC), Language Resources and Evaluation Conference (LREC 2014), Annual Conference of the European Association for Computer Graphics (EUROGRAPHICS 2014), Autonomous Agents and Multi-Agent Systems (AAMAS 2014) (Senior PC)*
- **2013** *International Journal of Human-Computer Studies, Journal on Multimodal User Interfaces, Intelligent Virtual Agents*
- **2012** *Artificial Intelligence in Interactive Digital Entertainment, Intelligent Virtual Agents (Senior PC), Autonomous Agents and Multi-Agent Systems*
- **2011** *MIT Press (manuscript reviewer), Journal of Presence: Teleoperators and Virtual Environments, Journal of Entertainment Computing, IJCAI, Socially Intelligent Surveillance and Monitoring, Artificial Intelligence in Interactive Digital Entertainment, IEEE SocialCom*
- **2010** *Journal of Cognitive Computation, Journal on Multimodal User Interfaces, Autonomous Agents and Multi-Agent Systems (Senior PC), Intelligent Virtual Agents (Senior PC), Artificial Intelligence in Interactive Digital Entertainment, AAAI, SIGGRAPH, CHI, Intelligent User Interfaces, IceTAL, Socially Intelligent Surveillance and Monitoring*
- **2009** *Autonomous Agents and Multi-Agent Systems, SIGGRAPH, CHI, International Gesture Workshop, Intelligent User Interfaces*
- **2008** *Multimodal Signals: Cognitive and Algorithmic Issues (LNAI), Computer Animation and Virtual Worlds, Autonomous Agents and Multi-Agent Systems*
- **2007** *Virtual Reality, Speech Communication, Persistent Conversation (HICSS), Intelligent Virtual Agents, Pragmatics of Computer-Mediated Communication, Artificial Intelligence Journal, SIGGRAPH, NODALIDA*
- **2006** *Human Computer Interface International, Computer Supported Cooperative Work, Persistent Conversation (HICSS), Intelligent Virtual Agents, AAAI, International Journal of Human-Computer Studies, Autonomous Agents and Multi-Agent Systems, CHI*

### *Other Recent Service Work*

- Chair of the Reykjavik University Research Council, 2016-2019

## SERVICE (continued)

- Appointed Member: Icelandic Ministry of Education, Science and Culture - Working group on a roadmap for research infrastructure in Iceland, 2018
- Review Panel Member: Deutsche Forschungsgemeinschaft (DFG), Clusters of Excellence, as part of the German Excellence Strategy, 2018
- Alternate Board Member: Icelandic Language Technology Fund, 2015-2018
- Board Member: Icelandic Institute for Intelligent Machines 2015-present
- Advisory Board: Icelandic Center for Futures Studies, Icelandic Institute for Intelligent Machines (until 2015), Radiant Games, Aldin Dynamics, CLARA
- On the Board of Directors: MindGames (2009-2015), Alelo UK
- On the Board and Co-Founder of Hugsýn, the Icelandic Cognitive Studies Society
- Local Chair of the 98th Esperanto World Congress, Reykjavik, 2013
- Member of the Empowering Women European Leonardo Project, 2010-2012
- President of the Icelandic Esperanto Association, Reykjavik, Iceland, 2012-2018
- External Referee, European Research Council, 2011
- Co-chair of LornaLAB, an Icelandic grass-roots forum for mixing art and technology
- Organizer, producer and designer of the Eitt mál fyrir allan heiminn "museum exhibit, on the 100th anniversary of the first Icelandic textbook for esperanto, The National Library of Iceland, 2009
- Jury member on the Icelandic high school innovation competition, NKG, 2009
- Contributor to the founding and running of the Icelandic Gaming Industry, 2009
- Co-organizer of the student game development competition at RU, 2009
- Co-hosted a meeting of the Ministry of Ideas grassroots innovation and social change organization, 2009
- In Björk's "Neisti"/"Nattura.info" organization team, responsible for a series of workshops, meetings and talks within the government and in the wider community regarding a "Green Future" for Iceland and alternatives to heavy industry, 2008
- Reviewer on the Icelandic high school innovation competition, NKG, 2008
- Tutor in the Icelandic high school innovation competition, NKG, 2007
- Member of a Ministry of Education / EU advisory group on *Improving IT use in education*, 2006
- Reviewer on grant proposals for *Rannis - The Icelandic Research Council*
- Founding member of *Mindmakers.org*, an online forum for open development of communicative humanoids and related AI middleware.

## INVITED TALKS AND PANELS

- 09/2020 • **Spjallað við sýndarverur** The 24th Annual Humanities Conference of the University of Iceland, Reykjavik, Iceland
- 11/2019 • **Áherslur í aljóðaáætlunum (Panel)**, The Annual Research Congress of the Icelandic Science and Technology Council, Reykjavik, Iceland
- 04/2019 • **Programmed wor(l)ds: Writing your way into a virtual dimension**, Keynote, 8th Conference of the International Association of Literary Semantics (IALS), University of Iceland, Reykjavik, Iceland
- 06/2018 • **The Fourth Industrial Revolution: Reaction of Academia**, 33rd meeting of the Icelandic Science and Technology Council, Reykjavik, Iceland
- 04/2018 • **Intelligent Machines and Artificial Intelligence**, Day of Engineering Symposium, Association of Chartered Engineers in Iceland (VFÍ), Reykjavik, Iceland
- 12/2017 • **Stigið inn í aðra vídd** *Icelandic Psychological Association*, Reykjavik, Iceland
- 09/2017 • **Crossing from Physical to Virtual Reality**, National Symposium on The Many Faces of Pain, Reykjavik, Iceland
- 03/2016 • **Tækifærin í þverfaglegum rannsóknum: Dæmi úr sýndarheimum** *Annual Meeting of National Union of Icelandic Students*, Bifröst, Iceland
- 11/2015 • **Building a Social Engine: Automating Social Cues for Avatars and Agents in Virtual Worlds** *CS Forum*, Aalto University School of Science, Helsinki, Finland

## INVITED TALKS AND PANELS (continued)

- 09/2015 • **Líðan fólks í þéttbýli framtíðarinnar könnuð með sýndarveruleika** *Advania Fall Conference*, Reykjavík, Iceland
- 04/2015 • **What Comes Next? Future Trends in Gaming and VR (Panel)** *SLUSH Play*, Reykjavík, Iceland
- 04/2015 • **Building a Social Engine** *The Icelandic Computer Society*, Reykjavík, Iceland
- 03/2015 • **Social Actors in Virtual Reykjavik** *ANIREY*, Nordic Seminar, Reykjavík, Iceland
- 10/2014 • **Building a Social Engine: Automating Social Cues for Avatars and Agents in Virtual Worlds** *HCII Seminar Series*, Carnegie Mellon University, USA
- 5/2014 • **Seeing Ourselves in Simulation** *International Workshop on Multimodal Corpora, Tools and Resources at LREC*, Reykjavík, Iceland
- 12/2013 • **The Mind-Body Problem for Social Encounters in Virtual Environments** *4th IEEE International Conference on Cognitive Infocommunications*, Budapest, Hungary
- 9/2013 • **Autonomous Extras for Games and Movies** *The Icelandic Science Fair (Vísindavaka)*, Reykjavík, Iceland
- 8/2013 • **Building a Social Engine: Automating Human Territoriality for Avatars and Agents**, *Department of Philosophy, Linguistics and Theory of Science*, Gothenburg University, Sweden
- 4/2013 • **The Social Engine: Automating Social Behavior in Virtual Environments** *The Rotary Club of Reykjavik*, Reykjavík, Iceland
- 10/2012 • **Breaking the Ice: Making both Player Avatars and Agents Socially Aware** Keynote at *The Eighth Annual AAAI Conference on Artificial Intelligence and Interactive Digital Entertainment*, Stanford, Palo Alto, California
- 12/2011 • **Building a Social Engine: Automating Human Territoriality for Avatars and Agents** *Alignment in Communication Colloquium Series*, Bielefeld University, Germany
- 6/2011 • **Gervigreindar vitverur (Artificially Intelligent Agents)** *Lecture Series of Lorna Lab: The Reykjavik Medialab*, Reykjavík
- 4/2011 • **Samskipti í sýndarrými (Communication in Cyberspace)** *The Humanities Anniversary Seminar Series*, University of Iceland
- 2/2011 • **Stafrænir holdgervingar og gervigreind (Avatars and AI)** *The Icelandic Theosophical Society*, Reykjavík
- 10/2010 • **Building a Social Engine: Automating Human Territoriality for Avatars and Agents** *Interactive Worlds Applied Research Group Lecture Series*, Coventry University, Coventry, UK
- 8/2010 • **Virtual Language and Culture Immersion** *Icelandic Online: Nordic Seminar on CALL and Corpora*, University of Iceland
- 12/2009 • **Framtíð gagnvirkar miðlunar** *Ný sköpun á skjánum*, jólaráðstefna 2009, Ský
- 4/2009 • **Automating Social Behavior**, Faculty of Science and Technology, University of Camerino, Camerino, Italy
- 1/2009 • **Interdisciplinary Innovation**, Pecha Kucha Night Reykjavik 1, The Ministry, Reykjavík
- 12/2008 • **Stafrænir holdgervingar í félagslegum sýndarheimi** *Fræðafundur*, Fræðafélagið Kvasir, Reykjavík
- 11/2008 • **Svona hagar fólk sér: Félagsleg hegðun fyrir leiki** *AI Festival*, School of Computer Science, Reykjavík University
- 9/2008 • **Notkun sýndarumhverfa í tungumálakennslu** *Evrópski tungumáladagurinn*, Stofnun Vigdísar Finnbogadóttur í erlendum málum og Samtök íslenskra tungumálakennara
- 4/2008 • **Representing Function and Behavior in Multimodal Communication** *International School on Multimodal Signals: Cognitive and Algorithmic Issues*, EU COST Action 2102
- 4/2008 • **Representing Function and Behavior in Multimodal Communication** *Árleg ráðstefna um tungutækni*, Tungutækniisetur
- 11/2007 • **Þróun og notkun alvarlegra leikja við kennslu** *IT in Education*, The IT and Education Society
- 7/2007 • **Fræðakvöld: Stafrænir holdgervingar í félagslegum sýndarheimi** *Res Extensa Lecture Series*, Res Extensa: The Mind, Health and Behavior Society
- 3/2007 • **Garage AI: The Panda 3D Engine** *Public Garage AI Series*, Reykjavík University
- 3/2007 • **Félagsleg tölvutækni sem kennir mál og sið** *Breakfast Lecture Series*, Association of Women in IT
- 3/2007 • **Gervigreind fyrir grafískar sögupersónur** *Tækni og Vit 2007*, The Industry Association with the Ministry of Industry and Commerce
- 11/2006 • **Lifandi mál og menning: Notkun tölvuleiks við tungumálakennslu.** *Tungumál og atvinnulífið: Margmiðlun*, Stofnun Vigdísar Finnbogadóttur í erlendum málum
- 10/2006 • **Using games to scaffold learning** *Trends in the use of learning objects*, NordFlex Virtual Conference

## INVITED TALKS AND PANELS (continued)

- 9/2006 • **Notkun félagslegra vitvera í tungumálakennslu** *Tæknidagar 2006*, Verkfræðingafélag Íslands og Tæknifræðingafélag Íslands
- 2/2006 • **Role of gesture in game-based language and culture training** *American Association for the Advancement of Science Annual Meeting*, St. Louis, MO
- 10/2005 • **Using Games for Education and Training** *The Summit on Educational Games*, Federation of American Scientists, Washington, DC
- 10/2004 • **Non Combat Military Game Efforts** *Serious Games Summit D.C.*, CMP Media, Washington, DC
- 2003 • **Personal Conversational Agents: Communicative agency through automated graphical avatars**
  - Information Sciences Institute, U. of Southern California, Marina del Rey, CA
  - Computer and Information Science Colloquia, U. of Pennsylvania, Philadelphia, PA
  - College of Computing Colloquia, Georgia Institute of Technology, Atlanta, GA
  - IBM Watson Research Center, Cambridge, MA
- 2001 • **Interdisciplinary Innovation** *Annual Symposium of the Engineer Society and University of Iceland*, Reykjavik, Iceland
- 2000 • **Using 3D Graphics in Online Communities: Opportunities and Challenges** *MediaMOO Annual Symposia*, Georgia Institute of Technology, in Cyberspace
- 2000 • **I, Avatar** *Internet Research 1.0 Conference*, Lawrence, KA
- 1998 • **Embodied Conversation** *Avatars '98 Conference*, Contact Consortium, in Cyberspace
- 1997 • **Life-like Avatars** *Avatars '97 Conference*, Contact Consortium, San Francisco, CA
- 1997 • **Avatars: State-of-the-art** *User Interface '97*, Cambridge, MA
- 1993 • **Digital Magic: Virtual Reality** *The Living Arts Museum*, Reykjavik, Iceland

## PRESS

- 05/2020 • *RUV Radio Channel 1*: Interview on "Óborg" radio mini series on the future of city planning
- 04/2019 • *RUV Radio Channel 1*: Interview on "Víðsjá" about the connection between creativity and programming
- 02/2018 • *BBC News - Arabic*: TV interview and demonstration of "Phobia Screening in VR"
- 02/2018 • *RUV Radio Channel 1*: Interview on "Fólk og fræði" about Artificial Intelligence research at CADIA
- 09/2017 • *RUV Radio Channel 1*: Interview on "Lestin" about implications of phone face recognition
- 09/2017 • *Bylgjan Radio*: Interview on "Reykjavík Síðdegis" about fears of AI taking over the world
- 08/2017 • *RUV Radio Channel 2*: Interview on "Síðdegisútvarpið" about VR therapy, connected to the Many Faces of Pain Conference in Reykjavik 1.-3. of September
- 09/2016 • *RUV Radio Channel 1*: Interview on "Lestin" about VR projects demoed at SLUSH Play
- 10/2014 • *ÍNN TV*: Interview on the innovation show "Frumkvöðlar" (Innovators) about the "Cities that Sustain Us" project
- 09/2014 • *RUV Radio Channel 1/2*: Interview on the morning show "Morgunútgáfan" the "Cities that Sustain Us" project
- 02/2012 • *RUV Radio Channel 1*: Interview on **three** episodes of "Fyrr og nú" about future of computing, social AI, virtual environments, smart rooms and imagination
- 01/2012 • *ÍNN TV*: Interview on the innovation show "Frumkvöðlar" (Innovators) about MindGames
- 03/2011 • *The Reykjavík Grapevine*: Telekinesis For Dummies (Mentioned in article about MindGames)
- 11/2010 • *RUV Radio Channel 1*: Interview on "2+2=5 og Eftirmyndir raunveruleikans" about Cyberspace
- 01/2010 • *RUV Radio Channel 2*: Interview on "Morgunvaktin" about RU moving day
- 01/2010 • *RUV Radio Channel 1*: Interview on "Samfélagið í nærmynd" about RU new campus
- 10/2009 • *Fréttablaðið*: Esperanto opnar dyr (Interview on exhibit opening at the National Library)
- 11/2008 • *HáVarp Opna Háskólans*: Interview called "Hvernig eru verur í sýndarumhverfi gerðar mannlegri?"
- 11/2008 • *Fréttablaðið*: "Hátækni á Íslandi: Sproti sem gæti orðið að styrkri stoð", niðurstöður hátækniþóps Neista
- 10/2008 • *RUV Radio Channel 1*: Björk's Neisti Workgroup Summary on "Í heyranda hljóði"
- 09/2008 • *RUV Radio Channel 1*: Interview on "Víðsjá"
- 09/2008 • *Fréttablaðið*: Verðlaunaðir fyrir sýndarmenni (regarding student project)
- 05/2007 • *Entrepreneur Magazine*: Take the Lead (As co-founder of Alelo Inc.)
- 05/2007 • *Fréttablaðið*: Tölvuleikir stuðla að framþróun vísinda (Interview/Profile)
- 03/2007 • *RUV Radio Channel 1*: Interview on "Samfélagið í nærmynd"

## PRESS (continued)

- 02/2007 • *Morgunblaðið*: Tilfinningatölvuverur (Interview)
- 09/2006 • *Morgunblaðið (front page)*: Lifandi mál og menning
- 08/2006 • *RUV Radio Channel 1*: Interview on "Víðsjá"
- 04/2006 • *Los Angeles Business Journal*: War of words: video game teaches combat troops to communicate
- 03/2006 • *DV*: Dr. Hannes Vilhjálmsson hjá háskóla Suður-Kaliforníu Kennir Könum að umgangast Íraka
- 02/2006 • *BBC News*: US troops taught Iraqi gestures
- 02/2006 • *National Geographic News*: Video Game Helps U.S. Soldiers Learn Arab Language, Culture
- 01/2006 • *Fréttablaðið*: Vopnin víkja fyrir vináttu (Interview)
- 04/2005 • *Vírus*: Vitrænar verur (Interview)
- 02/2005 • *Morgunblaðið (front page)*: Þróar tölvuleik fyrir herinn
- 02/2005 • *COX News Service*: Researchers tame violent video game to keep troops safe in Iraq (Appears in: Infowars, The Pulse Journal, Rocky Mount Telegram,...)
- 01/2005 • *Computer Gaming World*: Uncle Sam Gets Serious - Games are graduating and military simulations are just the start
- 12/2004 • *Giornale Tecnologico*: Videogiochi frontiera nel training (Italian)
- 12/2004 • *Training and Simulation Journal Online*: Deadly Serious
- 11/2004 • *Virgilio*: Videogame: non solo per divertirsi (Italian)
- 11/2004 • *Canalgame*: Videojuegos para entrenar a profesionales (Spanish)
- 11/2004 • *Reuters*: Video games teach more than hand-eye coordination (Appears in: The New Zealand Herald, Yahoo! News, USATODAY.COM, Video Game, Entertainment Software Association, LivingWithStyle.com, Entertainment Industry, AndySullivan.com...)
- 11/2004 • *GameDev.Net*: Serious Games Summit 2004 Report
- 09/2004 • *IEEE Intelligent Systems*: Gaming Technology Helps Troops Learn Language
- 08/2004 • *Dagblaðið Visir*: Íslendingur í New York Times (Icelandic)
- 07/2004 • *Asharq Al-Awsat* (Arabic)
- 07/2004 • *The New York Times*: Virtual Camp Trains Soldiers in Arabic, and More (Reprinted in: The Language Feed, Free Republic)
- 06/2004 • *USC Engineer*: Mission to Arabic: It's Not Your Father's Language Lab (Also: USC Viterbi News Online)
- to 2004 • Various appearances, most notably television appearances on PBS Scientific American Frontiers, ABC News and Stöð 2

## STUDENTS

### *PhD Supervision*

- Michelangelo Diamanti (expected 2021)
- Angelo Cafaro (2014)

### *PhD Committee/Examiner/Opponent*

- Petar Jercic (at Blekinge Tekniska Högskola) (2019)
- Paloma Gonzales (at Massachusetts Institute of Technology) (expected 2019)
- Kerstin Ruhland (at Trinity College Dublin) (2017)
- Klaus Förger (at Aalto University School of Science) (2015)
- Branislav Bédi (at University of Iceland) (2015)
- Kirsten Bergmann (at University of Bielefeld) (2011)
- Cathy Ennis (at Trinity College Dublin) (2010)

### *MS Thesis Supervision*

- Elías Ingi Björgvinsson (expected 2020)

## STUDENTS (continued)

- Edda Pétursdóttir (expected 2020)
- Dario Rizzo (2020)
- Unnar Kristjánsson (2019)
- Hörður Már Hafsteinsson (2019)
- Ari Þórðarson (2018)
- Guðrún Inga Baldursdóttir (2018)
- Joy Rossi (2017)
- Leonardi Veroli (2017)
- Marco Massetti (2017)
- Brynjar Ólafsson (2017)
- Karl Valdimar Kristinsson (2015)
- Ásgeir Jónasson (2015)
- Stefán Ólafsson (2015)
- Alfredo Conte (2012)
- Andrea Monacchi (2012)
- Francesco Lilli (2012)
- David Sorrentino (2012)
- Lorenzo Scagnetti (2012)
- Sigrún María Ammendrup (2011)
- Carmine Oliva (2011)
- Páll Rúnar Þráinsson (2011)
- Raffaele Gaito (at University of Salerno, Italy) (2010)
- Claudio Pedica (2009)
- Angelo Cafaro (at University of Salerno, Italy) (2009)

### *MS Thesis Examination*

- Svanhvít Lilja Ingólfssdóttir (2020)
- Nökkvi Gíslason (2020) (LHÍ)
- Hjalti Daníelsson (2019) (HÍ)
- Bjarni Leifsson (2018)
- Sigurgrímur Unnar Ólafsson (2018)
- Oscar Alfonso Puerto Melendez (2017)
- Tryggvi Þór Guðmundsson (2017)
- Kristján Tryggvason (2016)
- Karin Christiansen (2014)
- Eydís Huld Magnúsdóttir (2013)
- Fabrizio Fornari (2013)
- Björn Jónsson (2012)
- Kristján Rúnarsson (2011)
- Hlynur Sigurþórsson (2011)
- Grímur Tómasson (2011)
- Martha Dís Brandt (2010)
- Ida Kramarczyk (2009)
- Jónas Tryggvi Jóhannsson (2007)
- María Arinbjarnar (2007)

### *BS Theses Supervision*

- Anna Lára Sigurðardóttir (2020)
- Birgitta Rún Friðriksdóttir (2020)
- Brynja Dagmar Jakobsdóttir (2020)

## STUDENTS (continued)

- Laufey Inga Stefánsdóttir (2020)
- Sjöfn Óskarsdóttir (2020)
- Guðrún Margrét Ívansdóttir (2020)
- Hartmann Ingvarsson (2020)
- Andri Sæmundsson (2020)
- Njáll Mýrdal Árnason (2020)
- Edit Ómarsdóttir (2019)
- Helga Margrét Ólafsdóttir (2019)
- Hafdís Sæland (2019)
- Aníta Sól Jónsdóttir (2018)
- Árni Wing Ho Yu (2018)
- Kristinn Jóhannsson (2018)
- Tryggvi Bragason (2018)
- Einir Einisson (2017)
- Gísli Böðvar Guðmundsson (2017)
- Steingrímur Arnar Jónsson (2017)
- Ragnar Vilhjálmsson (2016)
- Hafdís Erla Helgadóttir (co-supervisor) (2016)
- Svanhvít Jónsdóttir (co-supervisor) (2016)
- Andri Sigurðsson (co-supervisor) (2016)
- Daníel Arnar Sigurðsson (co-supervisor) (2016)
- Friðrik Aðalsteinn Friðriksson (co-supervisor) (2016)
- Halldór Snær Kristjánsson (co-supervisor) (2016)
- Unnar Kristjánsson (2015)
- Páll Arinbjarnar (2015)
- Anna Dominiak (at Lodz University of Technology, Poland) (2014)
- Elín Carstensdóttir (2013)
- Giuseppe Esposito (2010)
- Hildur Sif Thorarensen (2010)
- Elvar Örn Unnþórsson (2009)
- Eiríkur Ari Pétursson (2009)
- Guðleifur Kristjánsson (2009)
- Árni Hermann Reynisson (2009)
- Bjarni Þór Árnason (2008)
- Ægir Þorsteinsson (2008)
- Óskar Vatnsdal Guðjónsson (2008)

## COURSES TAUGHT

- |             |   |
|-------------|---|
| 2020 Fall   | <ul style="list-style-type: none"><li>• Virtual Humans</li><li>• Natural Language Processing</li></ul>  |
| 2020 Spring | <ul style="list-style-type: none"><li>• Game Engine Architecture</li></ul>  |
| 2019 Fall   | <ul style="list-style-type: none"><li>• Virtual Environments</li><li>• Natural Language Processing</li><li>• Independent Study: "Development of wearable health technology"</li></ul> |
| 2019 Spring | <ul style="list-style-type: none"><li>• Game Engine Architecture</li><li>• Independent Study: "Game Based Learning"</li></ul>   |
| 2018 Spring | <ul style="list-style-type: none"><li>• Game Engine Architecture</li></ul>  |
| 2017 Fall   | <ul style="list-style-type: none"><li>• Problem Solving</li><li>• Virtual Environments</li></ul>  |
| 2017 Spring | <ul style="list-style-type: none"><li>• Game Engine Architecture</li></ul>  |

## COURSES TAUGHT (continued)

- Independent Study: "Interactive Characters for VR"
- Problem Solving
- Independent Study: "Full Body Simulation Inside a Virtual Environment"
- Independent Study: "Embodied Conversational Agents"
- Game Engine Architecture
- Independent Study: "Navigation in Virtual Reality and Simulation Sickness"
- Independent Study: "Procedural Generation of Buildings"
- Virtual Environments
- Natural Language Processing
- Game Engine Architecture
- Independent Study: "Intuitive User Interfaces for Virtual Reality"
- Independent Study: "Introduction of Multi-User Interaction into a Single-User Virtual Space"
- Game Engine Architecture
- Virtual Environments
- Electro-Mechanical Interactive Art
- Independent Study: "Character Animation"
- Natural Language Processing
- Learning in the Digital Age
- Electro Mechanical Interactive Art
- Game Engine Architecture
- Virtual Environments
- Independent Study: "Interactive Narrative and Emergence"
- Virtual Environments (at University of Camerino)
- Introduction to Artificial Intelligence
- Independent Study: "The Modeling and Interactive Rendering of The Reykjavik University Building"
- Independent Study: "Game Engine Development"
- Natural Language Processing
- Virtual Environments
- Independent Study: "Procedural Animation for Human Behavior"
- Independent Study: "Design and Implementation of a Navigation Mesh Based Path Finding System"
- Computer Graphics
- Natural Language Processing
- Independent Study: Open Source Technology for Massively-Multiplayer Games"
- Virtual Environments
- Introduction to Artificial Intelligence
- Independent Study: "Simulating Group Behavior in Avatar-based Virtual Environments"
- Independent Study: "Behavior Modelling in Virtual Creatures"
- Natural Language Processing
- Virtual Environments
- Introduction to Artificial Intelligence
- Independent Study: "Building and Performance Tuning a Real-time Nature Rendering Framework with Shaders"
- Natural Language Processing
- Operating Systems
- Independent Study: "Procedural Content Creation"
- Virtual Environments
- Introduction to Artificial Intelligence
- Independent Study: "Leitaraðferðir á leiðum í tölvuleikjum"
- Independent Study: "Coupling Autonomy and User Control in Avatar Based Online Interaction"