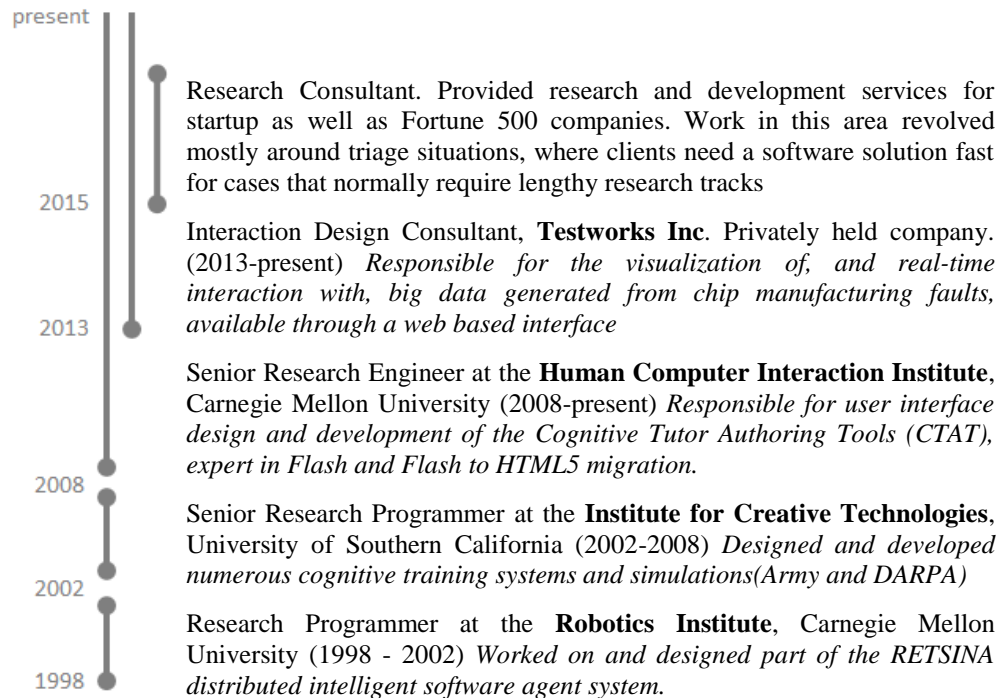


PROFILE Martin van Velsen is a senior research engineer in the Human Computer Interaction institute and graduate student in the Language Technologies Institute at Carnegie Mellon University. He is the lead visualization developer for the CTAT authoring research group. Martin also works fulltime on research projects of a wildly varied nature, some which are: neurosurgery simulations, large scale artificial intelligence architectures, virtual humans and cognitive training simulations. Martin serves as technical adviser to many leading specialists in the field of serious games, simulations, and digital entertainment.^{1,2}

CAREER HISTORY



PUBLICATIONS (Fiction) “The Bureau for Imminent Souls”, Excerpt from Novel, After Happy Hour Review (2014)

“Over”, Flash Fiction, Lascaux Review (2014)

PUBLICATIONS (Scientific) h-index: 8 Aleven, V., Sewall, J., Popescu, O., Ringenberg, M., van Velsen, M. and Demi, S., Embedding Intelligent Tutoring Systems in MOOCs and e-Learning Platforms, In Proceedings of the Thirteenth International Conference on Intelligent Tutoring Systems (ITS) (2016)

Matsuda, N., van Velsen, M., Barbalios, N., Lin, S., Vasa, H., Hosseini, R., Sutner, K. and Bier, N., Cognitive Tutors Produce Adaptive Online Course: Inaugural Field Trial, In Proceedings of the Thirteenth International Conference on Intelligent Tutoring Systems (ITS) (2016)

Aleven, V., Sewall, J., Popescu, O., van Velsen, M., Demi, S., & Leber, B. (2015). Reflecting on Twelve Years of ITS Authoring Tools Research with CTAT. Design Recommendations for Intelligent Tutoring Systems: Authoring Tools and Expert Modeling Techniques, 263.

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Adams, D.M., McLaren, B.M., Durkin, K., Mayer, R.E., Rittle-Johnson, B., Isotani, S., Van

¹ Story and Simulations for Serious Games, Nick Iuppa and Terry Borst, Focal Press (2006)

² End-to-End Game Development, Nick Iuppa & Terry Borst, Focal Press (2009)

Velsen, M., Using erroneous examples to improve mathematics learning with a web-based tutoring system, *Computers in Human Behavior*, Volume 36, July 2014, Pages 401-411

HersHKovitz, A., Baker, R.S.J.D., Moore, G., Rossi, L.M., Van Velsen, M., The Interplay between Affect and Engagement in Classrooms Using AIED Software, in proceedings of the 2013 conference Artificial Intelligence in Education (AIED) (2013)

Book Chapter Van Velsen, M., The Persuasive Language of Interaction: Rhetoric in the Digital Age, in: *Digital Rhetoric and Global Literacies: Communication Modes and Digital Practices in the Networked World*, IGI Global (2013)

Adams, D., McLaren B.M., Durkin, K., Mayer, R.E., Rittle-Johnson, B., Isotani, S., & Van Velsen, M. (2012). Erroneous examples versus problem solving: Can we improve how middle school students learn decimals? In N.Miyakem, D. Peebles, & R.P. Coppers (Eds.), *Proceedings of the 34th Meeting of the Cognitive Science Society (CogSci 2012)*

Van Velsen, M., Williams J., Verhulsdonck G., Narrative Concepts for AI Driven Digital Interactive Story Telling, in proceedings of the 2009 ICIDS conference (2009)

Van Velsen, M., Williams J., Verhulsdonck, G., Concepts for Interactive Digital Storytelling: From Table-top to Game-AI, in proceedings of the fifth conference on Artificial Intelligence and Interactive Digital Entertainment (AIIDE), (2009)

Jhala, A., Velsen, M., Challenges in Development and Design of Interactive Narrative Authoring Systems, a Panel, in proceedings of the 2009 AAAI Spring Symposium (2009)

Van Velsen, M., Towards Real-time Authoring of Believable Agents in Interactive Narrative, in proceedings of the 8th International Conference on Intelligent Virtual Agents (IVA-08), (2008)

Van Velsen, M., Narratoria, an Authoring Suite for Digital Interactive Narrative, accepted as a poster in proceedings of the 21st International Florida Artificial Intelligence Research Society Conference (2008)

Kim, Y., van Velsen, M., Hill, R.W. Jr., Modeling Dynamic Perceptual Attention in a Complex Virtual Environment, 5th International Working Conference on Intelligent Virtual Agents (2005)

Journal Article Mark A. Spicer, Ph.D., M.D Martin van Velsen, John P. Caffrey, Ph.D., and Michael L.J. Apuzzo, M.D. Virtual Reality Neurosurgery - A Roadmap, *International Journal: 'Neurosurgery'* (April 2004)

Gordon, A., van Lent, M., van Velsen, M., Carpenter, M., and Jhala, A., Branching Storylines in Virtual Reality Environments for Leadership Development. *Proceedings of the Sixteenth Innovative Applications of Artificial Intelligence Conference (IAAI)* (2004)

Hill, R.W. Jr., Douglas, J., Gordon, A., Pighin, F.P., van Velsen, M. Guided Conversations about Leadership: Mentoring with Movies and Interactive Characters. *Proceedings of the Fifteenth Innovative Applications of Artificial Intelligence Conference (IAAI)* (2003)

Journal Article Sycara, K., Paolucci, M., van Velsen, M. and Giampapa, J., The RETSINA MAS Infrastructure. In the special joint issue of the international journal: *Autonomous Agents and MAS*, Volume 7, Nos. 1 and 2, July (2003)

Massimo Paolucci, Zhendong Niu, Katia Sycara, Constantine Domashnev, Sean Owens and Martin van Velsen "Matchmaking to Support Intelligent Agents for Portfolio Management". In *Proceedings of Autonomous Agents* (2000)

EDUCATION B.Sc., Computer Science (Cum Laude), University of Professional Education (HR&O Rotterdam & Omstreken), the Netherlands

AWARDS Nominated and finalist for 'Most Innovative Video' in the International AI Video Competition during the Twenty-Third Conference on Artificial Intelligence (AAAI) (2008)

ACADEMIC SERVICE TO THE RESEARCH COMMUNITY Panelist: “Interactive Drama: Dialogue as Gameplay”, PAX East gaming convention (2011)
 Co-organizer and host of the Panel on Authoring Interactive Narrative at the AAAI Spring Symposium, Stanford University (2009)
 Program Committee Member: 2nd - 6th, 8th Workshop on Intelligent Narrative Technologies
 Member Review Committees: AIED (2010-2013), IJCAI (2009), EDM (2013)

COMMUNICATION SKILLS Fluent in: Dutch, English and German, knowledge of French. Written: Dutch, English and German

ARTISTIC ACCOMPLISHMENTS Winner of the 2012 LibraryThing - International Edible Book Competition

FILMOGRAPHY

| | | |
|-----------------------|---------------------------|---|
| De Bunker (1991) | Prosthetics / Props | http://us.imdb.com/Title?0103896 |
| Intensive Care (1992) | Prosthetics | http://us.imdb.com/Title?0104515 |
| The Johnsons (1992) | Make-Up Effects Assistant | http://us.imdb.com/Title?0104568 |
| Going Home (1993) | Prosthetics / Props | http://us.imdb.com/Title?0107729 |

MISCELLANEOUS Served in the Dutch 42nd Light Armored Brigade, a short-range reconnaissance Army unit

SOFTWARE SKILLS

Operating systems:
 Android, iOS, Linux, MacOS, Windows.

Languages:
 ActionScript, Assembler, Awk, C, C++, C#, Google App Script, Java, JavaScript, PHP, Python.

Technologies:
 DirectX, Flash, Flex, HTML5, OpenGL, ML, Qt, WebGL.

Software/Tools:
 Alice, GCC, Matlab, MS Visual C++, MS Visual Studio, Maya, ModSAF, OneSAF, R, SAS, SPSS, Unity.

Misc:
 Data Mining/Data Warehousing, Data Modeling, Strategic Software Management, Software Management under Time Constraints, Strategic Planning.

PATENT Critical Leadership Analysis System (CLAS). The CLAS system uses storytelling and interactive dialogue with virtual characters to support leadership development for US Army soldiers.

