

New Zealand Standard Curriculum Vitae Template

PART 1

1a. Personal details				
Full name	<i>Title</i> Prof	<i>First name</i> Andrew	<i>Second name(s)</i> Marion	<i>Family name</i> Phelps
Present position	Professor, Human Interface Technologies Lab NZ			
Organisation/Employer	University of Canterbury			
Contact Address	210 HITLabNZ, Level 2 John Britten Building			
	University of Canterbury. Private Bag 4800			
	Christchurch, New Zealand		Post code	8011
Work telephone	+64 3 369 0117	Mobile	(removed online)	
Email	andy.phelps@canterbury.ac.nz			
Personal website (if applicable)	http://andyworld.io			

1b. Academic qualifications

- 1999 - Master of Science, *magna cum laude*, Information Technology, Rochester Institute of Technology, USA
- 1997 - Bachelor of Arts, *cum laude*, Painting and Computer Art (dual major), Bowling Green State University, USA

1c. Professional positions held

- 2020-present **Professor**, HITLabNZ, University of Canterbury
- 2019-present **Director**, American University Game Lab
- 2019-present **Professor**, School of Communication, American University
- 2018-2019 **Professor**, College of Art & Design, Rochester Inst. of Tech. (RIT)
- 2017-present **President**, Higher Education Video Game Alliance, Washington, DC
- 2013-2018 **Founding Director**, RIT Center for Media, Arts, Games, Interaction & Creativity (MAGIC), RIT
- 2013-2018 **Founding CEO**, MAGIC Spell Studios, LLC
- 2010-2018 **Professor**, College of Computing & Info. Sciences, RIT
- 2009-2013 **Founding Chair/Director**, RIT School of Interactive Games & Media
- 2005-2010 **Associate Professor**, College of Computing & Info. Sciences, RIT
- 2004-2013 **Research Director**, Laboratory for Game Design & Development, RIT
- 2004-2009 **Director**, Game Design & Development, RIT
- 2001-2005 **Assistant Professor**, College of Computing & Info. Sciences, RIT
- 1999-2001 **Instructor**, College of Applied Science & Technology, RIT

1d. Present research/professional speciality

Professor Phelps is an expert in the design, development, and production of video games, as well as the design and implementation of associated educational and pedagogical efforts surrounding games education as it pertains to computing, the arts, design, and entrepreneurship. His work to date has resulted in the production of two academic programs (one undergraduate, one postgraduate) ranked in the top 5 in the US by the Princeton Review, the foundation one of the largest and most prestigious research centres in the field (the RIT MAGIC Center), and the design of a US\$30M facility for the associated MAGIC Spell Studios. His current work explores the use of games and media as educational platforms, and the ways that games culture, education, and virtual environments intersect, and thus spans elements of computing, visual arts, design, and associated application areas. His focus is on creating and teaching about games that have impact.

1e. Total years research experience	20 years
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1f. Professional distinctions and memberships (including honours, prizes, scholarships, boards or governance roles, etc)

Professional Positions and Recognitions

- 2018-present **Board Member**, Unity Global Education Advisory Board
- 2017-present **President** (2017-present) and **Co-Founder & Treasurer** (2014-2017) of the Higher Education Video Game Alliance (www.hevga.org)
- 2016 & 2017 New Media Consortium Horizon Report **Panel Expert**
- 2012-2017 **Board Member**, Adobe Partners by Design
- 2012 **Adobe Impact Award**
- 2009-present **Adobe Education Leader**

Research Awards

- 2019-2025 **Applied Immersive Gaming Initiative** funded by the Tertiary Education Commission of New Zealand. \$7.7M NZD (\$3M + institutional match)
- 2016-2018 **Regional Interactive Technologies Hub** NY State area hub funding, US\$3.2M. (renewed as a 'Center of Excellence' 2018-2021, additional US\$3.2M in funding and NY State support)
- 2015-2018 **MAGIC Spell Studios** NY State legislative funding initiative, US\$27.7M. (US\$12M from NYS Funding, US\$12.7M from Cisco, and US\$3M from Dell in combination public/private partnership) + US\$5M internal funding match
- 2011-2012 **An Innovative Educational Game Strategy for Conservation and Preservation** DOI National Park Service (NPS) & NCPTT. US\$25K
- 2009-2011 **Just Press Play: A Unified Game Layer for Education**. Microsoft Research, Redmond Washington. US\$300K.
- 2010-2012 "**Preserving Virtual Worlds II: Methods for Evaluating and Preserving Significant Properties of Educational Games**". US Library of Congress. US\$1M (US\$786K + Match) (multi-institutional)
- 2007-2009 **Preserving Virtual Worlds**. US Library of Congress Preserving Creative America NDIP, 2007. US\$590K + Match (multi-institutional)

Relevant Curriculum Development

- 2016 **Supervising faculty** of "Hack, Slash & Backstab" - first ever university game designed, developed, produced and published on the XBOX One platform.
- 2015 **Supervising faculty** of "Splattershup: A Game of Art & Motion" and associated projects course, the first course at the university split between academic practice and production in a commercial environment.
- 2007 **Founder and Director of the RIT Bachelor of Science in Game Design & Development** NYS Dept. of Education. Currently ranked in the top 5 in the nation by the Princeton Review.
- 2006 **Founder and Director of the RIT Master of Science in Game Design & Development** New York State Department of Education. Currently ranked in the top 5 in the nation by the Princeton Review.

1g. Total number of peer reviewed publications and patents	Journal articles	Books	Book chapters, books edited	Conference proceedings	Patents
	5	0	5	118	0

PART 2

2a. Research publications and dissemination

Peer-reviewed journal articles

1. **Phelps, A.**, Egert, C., and Bayliss, J., "Games in the Classroom at the Rochester Institute of Technology: A Case Study", in *IEEE Multimedia*, 16(3), pp. 82-88, 2009
2. **Phelps, A.**, Egert, C., and Bayliss, J., "Games in the Classroom: Using Games as a Motivator for the Study of Computing (Part II)", in *IEEE Multimedia*, 16(3), pp. 2-7, 2009.
3. **Phelps, A.**, Egert, C., and Bayliss, J., "Games in the Classroom: Using Games as a Motivator for the Study of Computing (Part I)", in *IEEE Multimedia*, 16(2), pp.4-8, April-June 2009.
4. **Phelps, A.**, Egert, C., and Bierre, K., "Games First Pedagogy: Using Games and Virtual Worlds to Enhance Programming Education", *Journal of Game Development*, 1(4), pp. 45-64, May 2006
5. Lunt, B., Reichgelt, H., Ashford, T., Willis, C., Slazinsky, E., and **Phelps, A.**, "An Empirical Comparison of Baccalaureate Programs in Computing", in *Journal of Information Technology Education*, 3, Santa Rosa, CA, pp. 19-34, 2004

Peer reviewed book chapters, books edited

1. Consalvo, M, and **Andrew Phelps**. "Game Development Live on Twitch: Observations of Practice and Educational Synergies." In *Game Production Studies: Cultural Studies of Video Game Industries*, edited by O. Sotamaa and J. Svelch. Amsterdam, the Netherlands: Amsterdam University Press. (In press.)
2. **Phelps, Andrew**, and Christopher Egert. 2019. "Balancing Entertainment and Educational Objectives in Academic Game Creation: A Production Focused Studio Classroom Approach." In *Global Perspectives on Gameful and Playful Teaching and Learning*, edited by M Farber. Hershey, PA: IGI Global.
3. **Phelps, Andrew**, C Egert, and A Decker. (2019) "Splattershmap: A Game of Art & Motion." In *Learning, Education & Games: 100 Games to Use in the Classroom & Beyond*, edited by K Schrier. Vol. 3. Pittsburgh, PA: Carnegie Mellon University: ETC Press.
4. Decker, A. C. Egert, **A. Phelps**, "Trial by a Many-Colored Flame: A Multi-disciplinary, a Community Centric Approach to Digital Media and Computing Education", in *New Directions for Computing Education* (S. Fee, et al, ed.), pp. 237-257. Springer International Publishing, Cham, Switzerland. 2017.
5. Egert, C. and **Phelps, A.**, "Motivating Science Education through Games", in *Learning to Play: Exploring the Future of Education through Video Games* (M. Khine, ed.), 53, pp. 129-151, Peter Lang, New York, New York, 2011.

Refereed conference proceedings

1. **Phelps, A.** and Consalvo, M. (2020) "Laboring Artists: Art Streaming on the Videogame Platform Twitch." Presented at the 53rd Annual Hawaii International Conference on Systems Science, Maui, HI. January 9, 2020.
2. Consalvo, M., & **Phelps, A.** (2019). "Performing game development live on Twitch." Presented at the Hawaii International Conference on Systems Science, Maui, HI. January 8, 2019.
3. Vullo, R. P., Egert, C., and **A. Phelps**. (2019) "*MARLi - Molly Alternate Realities Language interactive: A New XML Markup Language for Defining Virtual and Augmented Reality.*" International Conference on Internet Computing and Internet of Things, Las Vegas, NV.
4. Decker, A., Egert, C.A., and **Phelps, A.** (2018) "Learning to Create or Creating to Learn" International Academic Conference on Meaningful Play, October 11, 2018 East Lansing, Michigan. ETC Press.

5. Decker, A., Egert, C.A., and **Phelps, A.** (2016) "Splat! er, Shmup? A Postmortem on a Capstone Production Experience", Proceedings of the 2016 Frontiers in Education Conference, Erie, PA, 9 pages.
6. Decker, A., Egert, C., **Phelps, A.** and McDonough, J., (2012) "Technical Properties of Play: A Technical Analysis of Significant Properties for Video Game Preservation", Proceedings from the 2012 IEEE Interational Games Innovation Conference, Rochester, NY, pp. 56-59.
7. Egert, C., Jacobs, S., and **Phelps, A.**, (2006) "Bridging the Gap: Balancing Faculty Expectations and Student Realities in Computer Gaming Courses", in FuturePlay, Toronto, Ontario, Canada, pp. 201-204, October 2007
8. Egert, C., Bierre, K., **Phelps, A.**, and Ventura, P (2007) "Hello, M.U.P.P.E.T.S.: Using a 3D Collaborative Virtual Environment to Motivate Fundamental Object-Oriented Learning", in Companion to the 21st Annual ACM SIGPLAN Conference on Object-Oriented Programming Systems, Languages, and Applications (OOPSLA), Portland, OR, pp. 881-886, October 2007
9. Bierre, K., Ventura, P., **Phelps, A.**, and Egert, C., "Motivating OOP by Blowing Things Up: An Exercise in Cooperation and Competition in an Introductory Java Programming Course", in Proceedings of the 37th Technical Symposium on Computer Science Education, Houston, TX, pp. 354-358, March 2006
10. **Phelps, A.**, Egert, C. and Bierre, K., "MUPPETS: Multi-User Programming Pedagogy for Enhancing Traditional Study: An Environment for both Upper and Lower Division Students", in IEEE Frontiers in Education, Indianapolis, IN, pp. S2H-8 - S2H-15, October 19-22, 2005
11. Bierre, K., and **Phelps, A.**, "The Use of M.U.P.P.E.T.S. in an Introductory Java Course", in Proceedings of the 5th Conference in Information Technology Education, ACM Special Interest Group for Information Technology Education, Salt Lake City, UT, pp. 122-127, 2004.
12. **Phelps, A.**, Bierre, K. and Parks, D., "MUPPETS: Multi-User Programming Pedagogy for Enhancing Traditional Study", in Proceedings of the 4th Conference in Information Technology Education, ACM Special Interest Group for Information Technology Education, Lafayette, IN, pp. 100-105, 2003

Other forms of dissemination (reports for clients, technical reports, popular press, etc)

1. **Phelps, A.**, Cloutier, Al, et al. (2019) *Fragile Equilibrium: An Action Game of Melancholic Balance*. Video game. XBOX One, Steam. Shown at the International Conference on Interactive Digital Storytelling (ICIDS) 2019 Art Exhibit. Curated by R. Brown and B. Salisbury. Winner by independent jury selection of the 2019 ICIDS Award for Visual Excellence. Nov., Salt Lake City, UT
2. **Phelps, A.**, Cloutier, Al, et al. *Fragile Equilibrium: An Action Game of Melancholic Balance*. Video game. XBOX One, Steam. Shown at Miami@Play in collaboration with Filmgate Miami and Miami Art Basel, curated by L. Grace, D Alexander, C Ewing, L Tran. Dec. 1-6 2019, Miami, FL. <http://miamiplay.org>
3. **Phelps, A.**, Consalvo, M., and Egert, C. "Development Streaming as a Pedagogical and Community Strategy for Games Education." Workshop on New Research Perspectives on Game Design & Development Education. CHI PLAY 2018, October 28, 2018, Melbourne, Australia.
4. **Phelps, A.**, & Consalvo, M. (2018) "Live Streaming Game Design & Development: A Glimpse Behind the Mystic Curtain with Pedagogical Possibilities" at The Inter-PLAY of Game Studies and Game Design, 2018 NCA Preconference, University of Utah. S Orme, University of Suffolk. National Communication Association 104th Annual Conference, Salt Lake City, Utah.
5. Decker, A., **Phelps, A.** and Egert, C.A. (2017) "Disappearing Happy Little Sheep" EdTech: Focus on K-12. 57:2, pp. 50-54.

6. Beyond the BA: Navigating Status as a Department, Center OR Program, While Working with Industry Partners. Mia Consalvo, Jim Whitehead, Roger Altizer, **Andrew Phelps**. 31st Game Developer's conference (GDC), San Francisco, CA, March 2017.
7. Grush, Mary. 11/29/16 "MAGIC at RIT: Engineering the Happy Accident." (Interview with **A. Phelps**) Campus Technology Magazine. Retrieved online Nov 14, 2018: <https://campustechnology.com/articles/2016/11/29/magic-at-rit-engineering-the-happy-accident.aspx>.
8. Lorenzo, George. 8/4/2016. "Digital Game-Based Learning in Higher Ed Moves Beyond the Hype. EdSurge. (interview featuring **A. Phelps**). Retrieved online Nov 14, 2018: <https://www.edsurge.com/news/2016-08-04-digital-game-based-learning-in-higher-ed-moves-beyond-the-hype>
9. **Phelps, A.**, Cloutier, A., et al. 2016 *Hack, Slash & Backstab*. MAGIC Spell Studios. Video game. Available XBOX One / XBOX Live, Steam, Humble Store.
10. Who Owns What and Why? Student IP, Faculty IP, and Game Design Programs Owen Gottlieb, **Andrew Phelps**, Tracy Fullerton, Ira Fay, Mary Flanagan, Drew Davidson, 30th Game Developer's conference (GDC), San Francisco, CA, March 2016.
11. **Phelps, A.**, A. Cloutier, et al. *Splattershmup: A Game of Art & Motion*. Indie Arcade 2016. Smithsonian Museum of American Art. Washington D.C. January 2016.
12. **Phelps, A.**, A. Cloutier, et al. *Splattershmup: A Game of Art & Motion*. Learning Arcade. Games+Learning+Society 11. Madison, WI. June 2015. Finalist (1 of 5) for Educational Game of the Year.
13. Clapp, Jake. Dec 10, 2014. "Developing an Industry" CITY Newspaper. (Interview featuring **A. Phelps**). Retrieved Online Nov 14, 2018: <https://www.rochestercitynewspaper.com/rochester/developing-an-industry/Content?oid=2473102>
14. **Phelps, A.** and Schell, J., "Cutting Edge Education Update", Microsoft Research Faculty Summit, Redmond, WA, July 2010
15. McDonough, J. P., Olendorf, R., Kirschenbaum, M., Kraus, K., Reside, D., Donahue, R., **Phelps, A.**, Egert, C., Lowood, H., and Rojo, S., Preserving Virtual Worlds Final Report, September 20, 2010, <https://www.ideals.illinois.edu/handle/2142/17097>
16. Bogost, I., Brubaker, G., **Phelps, A.**, White, W., Whitehead, J., and Zyda, M., "Creating and Managing an Academic Games Program", Foundations of Digital Games Conference, April 26-30, 2009
17. Fullerton, T., Roberts, S., **Phelps, A.**, Buchanan, J., and Nitsche, M., "Successful Game Programs", Game Developer's Conference, San Francisco, CA, March 2008
18. **Phelps, A.**, Egert, C., Bierre, K., and Parks, D., "An Open-Source CVE for Programming Education: A Case Study", The 32nd International Conference on Computer Graphics and Interactive Techniques (SIGGRAPH), Los Angeles, CA,
19. Montalbano, Elizabeth. October 7, 2008. **A. Phelps** interviewed for Games for Learning Institute featured in *The New York Times*. Retrieved Nov 14, 2018: http://www.nytimes.com/idg/IDG_852573C400693880002574DA0051B914.html?ref=technology, Fall 2008
20. Work with the Games for Learning Institute featured in the Chronicle for Higher Education, interview with **A. Phelps**, K. Perlin. <http://chronicle.com/wiredcampus/index.php?id=3370>, Retrieved Nov 1, 2010.
21. Partridge, Allen. "Creating Games for Fun & Profit." Thomson Learning Game Development Series, Charles River Media. Interview with professor **A. Phelps**.