

**Mgr. Cyril Brom, Ph.D.** (born 1978, Prague)

- education: Faculty of Mathematics & Physics, Charles University in Prague (MFF UK)
  - graduated in 2003 with honors
  - Ph.D. studies MFF UK 2003-2007 (Ph.D. – computer science, 1.6.2007)
- assistant professor at MFF UK at Department of Software and Computer Science Education since 2007

Main research and development projects:

- GAČR P407/12/P152 - “LEES: Learning Effects of Educational Simulations” (2012-2014; principal investigator)
- GAČR P103/10/1287 - “PlanEx: Planning & Execution” (2010-2014; participant)
- OPPA CZ.2.17/3.1.00/33274 - “Innovations to the Study Program Informatics at MFF UK: Serious Games and Simulations” (2011 - 2013; project manager)
- NAKI DF11P01OVV030 - “Stories from the History of Czechoslovakia” (2011 - 2014; participant)
- OPPA CZ.2.17/3.1.00/31162 “Educational Simulations for Computer Science and Biology for High-school and University Students” (2009-2011; technical supervisor)
- JPD3 CZ.04.3.07/3.1.01.3/ 3213 “The Integration of IT Tools into Education of Humanities” (2006-2008; technical supervisor)
- 1E 1ET100300517 “Methods for Intelligent Systems and Their Applications in Data-mining and Natural Language Processing” (2005-2009; participant)

Main teaching activities:

- A course on “Human-like artificial agents”
- A course on “Computational cognitive sciences” (75%)
- A course on “Computer games development (20%)”
- Supervising of two dozens of student projects, including five Ph.D. projects

Selected papers:

- Brom C., Vyhnanek J., Lukavsky J., Waller D., Kadlec R.: A computational model of the allocentric and egocentric spatial memory by means of virtual agents, or how simple virtual agents can help to build complex computational models. In: Cognitive Systems Research, Vol. 17-18 (2012)
- Brom, C., Sisler, V., Buchtova, M., Klement, D., Levčík, D.: Turning High-Schools into Laboratories? Lessons Learnt from Studies of Instructional Effectiveness of Digital Games in the Curricular Schooling System. In: E-Learning and Games for Training, Education, Health and Sports 7th International Conference, Edutainment 2012 and 3rd International Conference, GameDays 2012, Darmstadt, Germany, September 18-20, LNCS Vol. 7516 (2012) pp. 41 - 53 (**best paper**)
- Brom, C., Preuss, M., Klement, D.: Are Educational Computer Micro-Games Engaging And Effective For Knowledge Acquisition At High-Schools? A Quasi-Experimental Study. In: Computers & Education 57 (2011), pp. 1971-1988
- Brom C., Šisler V., Slavík R.: Implementing Digital Game-Based Learning in Schools: Augmented Learning Environment of 'Europe 2045' In: Multimedia Systems, 16(1), pp. 23-41, 2010
- Brom, C., Poch, T., Sery, O.: AI Level of Detail for Really Large Worlds. In: Game Programming Gems 8, Course Technology PTR, pp. 213-231, 2010
- Gemrot, J., Kadlec, R., Bída, M., Burkert, O., Píbil, R., Havlíček, J., Zemčák, L., Šimlovič, J., Vansa, R., Štolba, M., Plch, T., Brom, C.: Pogamut 3 Can Assist Developers in Building AI (Not Only) for Their Videogame Agents. In: Agents for Games and Simulations, LNCS 5920, Springer, pp. 1 - 15, 2009

- Šerý, O., Poch, T., Šafrata, P., Brom, C.: Level-Of-Detail in Behaviour of Virtual Humans. In: Proceedings of SOFSEM 2006: Theory and Practice of Computer Science, LNCS 3831, Springer-Verlag, Czech Republic (2006) 565 – 574 (**best paper student research forum**)
- Brom, C., Pešková, K., Lukavský, J.: What does your actor remember? Towards characters with a full episodic memory. Proceedings of 4th International Conference on Virtual Storytelling, Saint-Malo, France. LNCS, Springer-Verlag, Berlin, 2007
- Brom, C., Šerý, O., Poch, T.: Simulation Level of Detail for Virtual Humans. In: Proceedings of 7th International Conference on Intelligent Virtual Humans, LNCS Vol. 4722. Paris, France. Springer-Verlag, Berlin. (2007) 1-14

#### Short-term international visits:

- University of Bath (J. Bryson, 2006, 2010)
- University of Memphis (S. Franklin, 2008)

#### Organization:

- co-organizer of Agents for Educational Games and Simulations Workshop at AAMAS 2011 (Taipei, Taiwan, 2011)
- co-presenter of a tutorial on 3D human-like agents at AAMAS 2011 (Taipei, Taiwan, 2011)
- co-organizer of Human Memory for Artificial Agents Workshop at AISB 2011 (York, GB, 2011)
- main chair of Workshop Videogames & Society at Cyberspace conference

#### Membership:

- Czech Neuroscience Society
- Biologically Inspired Cognitive Architectures Society (founding member)
- Lab council: Laboratory of Behavioral and Linguistic Studies
- Programming committee: Artificial Intelligence and Interactive Digital Entertainment
- Academic Senate of MFF UK

#### Research collaboration:

- Faculty of Arts of Charles University in Prague, New Media Studies
- Prague Game Studios, spol. s r. o.
- University of Veterinary Medicine Vienna (Lisa Glenk, Rupert Palme)
- Institute of Psychology of the Academy of Sciences of the Czech Republic, Laboratory of Behavioural and Linguistic Studies
- Faculty of Science of Charles University in Prague, Department of Zoology
- Institute of Physiology of the Academy of Sciences of the Czech Republic
- Institute of Contemporary History of the Academy of Sciences of the Czech Republic
- University of Delft (Koen Hindriks)
- University in Bath (Joanna Bryson)
- Generation Europe, o. s.

#### Other interest:

- science communication
- theatre