



István BARAKONYI, PhD

 +43-699-18056500

 istvan@barakonyi.net, <http://barakonyi.net/>

Personal information

- **Year of birth:** 1977
- **Marital status:** married
- **Nationality:** Hungarian

Education

- **PhD course** at the Vienna University of Technology and Graz University of Technology, Austria, 2002 - December 2006, graduated with distinction
Topic: *Ubiquitous Animated Agents for Augmented Reality*
- **Visiting researcher**, National Institute of Informatics, Prendinger Laboratory, Tokyo, Japan, 2005 October – November
- **Visiting researcher** (Monbusho scholarship), University of Tokyo, Japan, Ishizuka Laboratory, 2000 October-2002 March
- **Master's degree** in Computer Science, Technical University of Budapest, Hungary, Faculty of Electrical Engineering and Informatics, special program in Multimedia and Communication Networks, 1995-2000
- **Exchange student** scholarship, University of North Texas, Denton, Texas, United States of America, 1998 Fall semester
- **Summer university** course on Picture Technology Applications organized by the Board of European Students of Technology, Grenoble, France, 1999
- Zrinyi Miklos High School, **special program in mathematics**, winner of the Zrinyi Miklos Foundation Award, Zalaegerszeg, Hungary, 1991-1995

Summary of qualifications

- **10+ years of software development experience**
 - Mobile platforms: Android, Windows CE, Windows Mobile, Symbian OS (S60, UIQ) / Carbide.C++, iPhone OS / XCode
 - PC platforms: Windows XP/Vista/7, Unix/Linux, MacOS X
 - C/C++, ACE, Java, JFC/Swing, SQL, XML-related technologies (XPath, XSLT, DTD, Schema, XML databases, etc.), Matlab, i386 assembly, Pascal, Visual Basic
 - OpenGL, DirectX, OpenInventor (SGI, TGS, Coin)
 - Javascript, HTML, DHTML, VRML, CSS, Macromedia Director, Lingo, Dreamweaver, DVD authoring tools, Maya, 3D Studio Max, Character Studio, Adobe Photoshop, Illustrator, Premiere, AfterEffects, QuarkXPress, LaTeX
- **5+ years of commercial experience** in developing mobile 3D graphics and handheld user interfaces
- **Rich research experience** in augmented reality, virtual reality, ubiquitous computing, pervasive computing, software agents, interactive 3D information visualization and animation, animated presentational agents, 3D facial animation, affective behavior and emotion models, character design, multimodal interfaces
- **Project management skills**
 - Managing mobile augmented reality projects with customers and research partners
 - Controlling and reporting for a European Union 5th Framework Program project
 - Project supervision for several students at Bachelor's and Master's level
 - Training experience as a teaching assistant in university courses
 - Workshops at the Student Leadership Conference in Chicago organized by Andersen Consulting as the only Hungarian participant, 1999
- **Outstanding oral and written presentation skills**
 - Publications, presentations and demos at prestigious international conferences
 - Presentations and reports at EU project meetings and for the EU Commission

Employment and job experience

- **Staff Engineer**, Qualcomm Austria Research Center, Vienna, Austria, 2009 March – to date
- **Mobile Software Engineer**, Magitech GmbH, Vienna, Austria, 2007 January – 2009 March
- **Visiting researcher** at the National Institute of Informatics, Multimedia Information Research Division, Tokyo, Japan, 2005 October - November
- **Research assistant** in the START project of the Austrian Science Fund FWF, Graz University of Technology, Institute of Computer Graphics and Vision, Graz, Austria, 2004 June – 2006 December
- **Research assistant** in the Lab@Future European Union IST project, Vienna University of Technology, Interactive Media Systems Group, Vienna, Austria, 2002 June - 2005 April
- **Visiting researcher** at the University of Tokyo, Japan, Dept. of Communication and Information Engineering, Ishizuka Laboratory, 2000 October - 2002 March
- **Software developer**, Digital Elite, Los Angeles, Dee3DB Java applet-based database manipulation through Internet, 2000
- **Software developer**, Siemens-Hungary, interactive search engine with graphical user interface using JDBC for touch-screen terminal, Multimedia-Max Ltd., 2000
- **Software developer**, Moulin Rouge, Budapest, table-booking software using JDBC and JFC, Multimedia-Max Ltd., 2000

Scientific activities

- **Program Committee Member**: ISMAR 2006-2010
- **Reviewer** for numerous prestigious conferences and journals
- **Publicity Co-Chair**, ISMAR 2007, Nara, Japan
- **Student volunteer**, ISMAR 2005, Vienna, Austria
- **Organizing Committee Member**, Virtual Conversational Characters: Applications, Methods, and Research Challenges Workshop at the HF'2002 and OZCHI 2002 Conference, Melbourne, Australia, 2002

Selected scientific publications

- I. Barakonyi, D. Schmalstieg, "*Ubiquitous Animated Agents for Augmented Reality*", In Proc. of IEEE and ACM International Symposium on Mixed and Augmented Reality 2006 (**ISMAR 2006**), Santa Barbara, CA, USA, pp. 145-154.
- I. Barakonyi, D. Schmalstieg, "*Augmented Reality in the Character Animation Pipeline*", Sketch publication and presentation, **SIGGRAPH 2006**, Boston, MA, USA
- I. Barakonyi, T. Psik, D. Schmalstieg, "*Agents That Talk And Hit Back: Animated Agents in Augmented Reality*", In Proc. of IEEE and ACM International Symposium on Mixed and Augmented Reality 2004 (**ISMAR 2004**), Arlington, VA, USA, pp. 141-150.
- I. Barakonyi, T. Fahmy, D. Schmalstieg, "*Remote Collaboration Using Augmented Reality Videoconferencing*", In Proc. of **Graphics Interface 2004 (GI'04)**, May 17-19, London, ON, Canada, pp. 89-96.
- N.P. Chandrasiri, I. Barakonyi, T. Naemura, M. Ishizuka, H. Harashima, "*Internet Communication Using Real-time Facial Expression Analysis and Synthesis*", In **IEEE Multimedia**, Vol.11, No. 3, July-Sept 2004, pp. 20-29.

Awards

- Visiting researcher (Monbukagakusho scholarship), University of Tokyo, Japan, Department of Communication and Information Engineering, Ishizuka Laboratory, 2000 October - 2002 March
- Invited participant representing Hungary at the Student Leadership Conference in Chicago organized by Andersen Consulting, 1999
- International Student Exchange Program scholarship, University of North Texas, Denton, Texas, USA, 1998 Fall semester
- Zrinyi Miklos Foundation Award from the Zrinyi Miklos High School, 1995

Languages

- Hungarian - mother tongue
- English - fluent (working language since 2000, TOEFL)
- German – fluent (working language since 2002)
- Japanese – intermediate (Japanese Proficiency Test, 3rd level)

Personal skills

- Hard-working and reliable
- Strong interpersonal and communication (written and oral) skills
- Organizational and planning skills
- Long experience in working in an international team
- Ability to work as team member or team leader
- Experience in remote working

Hobbies

- Piano
- Basketball, badminton, scuba diving
- Dancing
- Traveling, photography
- Japanese culture