AMELA SADAGIC, PH.D.

Curriculum Vitae – September, 2019

CONTACT INFORMATION

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EXPERTISE AND RESEARCH INTERESTS

Simulations; virtual reality (VR); augmented reality (AR); human factors in VR/AR; multiuser collaborative environments; coupling and evaluation of emerging technologies in support of systems for operation, training, and learning; additive manufacturing; diffusion and large-scale adoption of technical innovations.

PROFESSIONAL EXPERIENCE

Dec 2004 – present Naval Postgraduate School, MOVES Institute, Monterey, CA, Research Associate Professor

- Co-director, NPS Center for Additive Manufacturing (May 2019-present). Initiated a creation of the Center, coordinated center's activities and established 'Naval Additive Manufacturing 2030' research initiative.
- PI and co-PI for several ONR, DTO, IARPA, NMSO and OPNAV sponsored studies. To
 date those projects involved over 4500 USMC and USN personnel with many NPS students
 actively involved in those studies. The research was focused on use of sensor technologies
 and novel instrumentation systems on physical training ranges, evaluation of training
 effectiveness in computer-supported training simulations, validation of simulations, and
 design of novel training system and training methodologies and pedagogies used with
 virtual training simulations.
- PI and co-PI on NPS research efforts supported by close to \$10M of funding. Lead PI on 'Behavioral Analysis and Synthesis for Intelligent Training BASE-IT' project (sponsor: ONR, \$6.5M, four years; collaborating institutions: NPS, Sarnoff Corporation and University of North Carolina at Chapel Hill), and co-PI on '3D Display and Capture of Humans for Live-Virtual Training' project (Sponsor: ONR, \$1.8M, four years; collaboration with University of North Carolina at Chapel Hill and University of Central Florida).
- Current project: PI on "Metrics and Measurement in Additive Manufacturing Domain: Adoption and Return on Investment" project funded by OPNAV (funding level: \$167K), and PI on "Effectiveness of Training Systems that Employ Virtual Reality, Augmented Reality, and Touchscreen Displays" project funded by OPNAV (funding level: \$136K).
- Teach "Human Factors for Virtual Environments" (MV4001) master level course, and "Introduction to Virtual Environment Technology" (MV3922) seminar. Share a coordination of "Current Topics in Modeling, Virtual Environments & Simulation" (MV4924) research seminar with Dr. Arnie Buss. In the past thought "Human Computer

- Systems Interaction" (CS3004) course.
- Current course coordinator for MV4001 and MV3922. Developed course materials for multiple courses, and a lead for course modification of CS3004 in 2016.
- Thesis advising: Advisor to multiple master students. Curricula: (1) Modeling, Virtual Environments and Simulation; (2) Computer Science; (3) Security Studies (Homeland Security and Defense); (4) Cyber Systems and Operations, and (5) Network Operations and Technology. A member of PhD committee for one MOVES PhD student and one PhD student from University of North Carolina at Chapel Hill.
- Mentor to multiple student interns engaged with NPS through STEM and SEAP programs (2011-2016).
- Creator and coordinator of MOVES Gadgets Den a resource made available to students
 for their thesis research and in support of classroom projects. Lead on equipment purchases
 for MOVES Virtual Environments laboratory.
- Main advisor for two NPS master students who were the winners of the SECNAV Innovation Award for 2015. LT B. Geoghegan (US Navy) was a Winner in the category of Innovation Scholar (Professional Military Education), and LT L. Greunke (US Navy) received Honorable Mention (3rd place) in the same category.
- Active contributor to SECNAV Virtual Environments Initiative (2015-2016) and SECNAV
 Task Force Innovation Working Group, Emerging Operational Capabilities, Joint
 Advanced Manufacturing Region Southwest (2015-2016).
- Elected member of NPS Faculty Council Executive Board (2015, 2016, 2017).
- Elected member of NPS Faculty Council Budget Committee (Jan 2018 present).
- Elected member of NPS Faculty Council Faculty-at-large (3 years: Jan 2015 Dec 2017).
- Elected member of NPS Faculty Council and Faculty Council representative in NPS Research Board (Jan 2011 Dec 2013).
- Member and a lead of 'Workplace Equal Opportunity' NPS Command Climate Survey (CCS) Focus Group, and a member of 'Gender Barriers to Success' Focus Group (2014). Both groups were appointed by the NPS President R. A. Route, Vice Admiral, U.S. Navy (Ret.).
- Faculty Council representative in Financial Management Advisory Committee (former KFS Configuration Control Board (CCB)) and a member of several subcommittees within this group (2011 present).
- Member of two committees for NPS Faculty Handbook (efforts in 2011–2012, and 2014 2016).
- Coordinator of MOVES demos for Discover NPS Day (2017, 2018, 2019).
- Member of MOVES Facilities Committee (2014 2018).
- Member of MOVES Curriculum committee (2007 present).
- Member of MOVES PhD Committee (2008 present).
- Lead of MOVES Human Factors and Training Systems focus group (2005 present).
- Member of several ad-hoc committees formed in support of DoD training domain.
- Received a Special Act Award in 2006 for the research efforts in support of the US Marine Corps training domain.

Oct 2003 – Dec 2004 Partnership for Emerging Learning Environments, co-Director

• Provided strategic consulting and training on effective uses of emerging technologies for learning and collaboration.

May 1999-Oct 2003 Advanced Network & Services, Armonk, NY, Director of Programs and Senior Computer Science Researcher

- Managed technical coordination of 30-members large team of researchers from four leading US universities that formed a research consortium called National Tele-immersion Initiative (NTII) (Brown University, Naval Postgraduate School, University of North Carolina, and University of Pennsylvania); application developed in this project served as the exemplary application for Internet2 network. Coordinated activities in all NTII laboratories together with a Lead Scientist Jaron Lanier; project funding: \$10M. Project was subsequently sponsored by Defense Advanced Research Projects Agency (DARPA) and National Science Foundation (NSF).
- Chaired Internet2 Application Quality of Service (QoS) Needs Design Team, (part of Internet2 QoS Working Group).
- Designed and lead innovative national and regional K-12 projects that promoted the use of emerging digital technologies in teaching and learning. Projects: Imagining the Future, Exploring the Future of Learning and Seals on Camera. Magazine Technology & Learning selected a project "Virtual Marine Biology (Seals on Camera)" as one of Top 10 Innovative projects in 2003 (my role: project co-designer).
- Led and conducted a research on the effective use of remote collaboration in learning environments.

May 1998-Jun 1998 University of Westminster, London, UK, Visiting Lecturer

• Taught masters level course "Concepts of Computer Graphics" at the School of Computer Science.

Jan 1998-Oct 1998 / May 1996-Oct 1996 Department of Computer Science, University College London, London, UK

Researcher, COllaborative Virtual Environments (COVEN) project,

• A multinational EC sponsored project focused on the development of a computational service for future cooperative teleworking and virtual presence. Designed and executed several user studies focused on a small team collaboration in Virtual Environments.

Researcher, Inhabiting The Web (Inhabit) project

 Design and implementation of the VR system for distributed collaborative work. Project sponsored by British Telecom, BT, and done as a partnership of five leading national universities and the BT.

Jun 1997-Sep 1997 Department of Computer Science, University of North Carolina, Chapel Hill, NC, Visiting Scholar

• Invited and supervised by Dr. Frederick P. Brooks Jr. Led and managed a small team working on The Brooks House II model. Explored and advised on different paths aimed at improving the overall realism of the model and enabling compelling VR experience.

Jan 1995-May 1995 Queen Mary and Westfield College, London, U.K., Laboratory Supervisor

• Undergraduate courses: "Interactive Computer Graphics", "Introduction to Computer Programming in Biology"

Sep 1991-Apr 1992 Dept. of Computer Science, Faculty of Electrical Engineering, University of Sarajevo, Bosnia & Herzegovina, Teaching Assistant

• Undergraduate course: "Computer Graphics"

Mar 1987-Apr 1992 Institute for Automatics and Computer Science (IRCA), Energoinvest Co., Sarajevo, Bosnia & Herzegovina, Senior Research Engineer

• Managed a team that implemented PHIGS graphics standard for PROGRAPH II graphics workstation. Researcher on the joint project "Visualization Environment" with the "Institute fuer Informatik", Freiburg, Germany (project led by Professor Heinrich Muller).

EDUCATION

University College London (UCL), London, UK, Ph.D., Nov 1994 - Mar 1999

Department of Computer Science

• Research area: Computer Graphics and Virtual Reality, Ph.D. thesis: "Efficient Image Display for Head-Slaved Viewing of Virtual Environments". Advisor: Prof. Mel Slater.

University of Sarajevo, Bosnia & Herzegovina M.Sc., Oct 1987 - Apr 1992

Faculty of Electrical Engineering, Department of Computer Science

• Research area: Computer Graphics. Thesis: "The Architecture and Development of PHIGS Graphics Standard for Graphics Workstation PROGRAPH II". Advisor: Prof. Niko Guid, University of Maribor, Slovenia. All exams for master degree passed; thesis text completed and published. Due to the outbreak of the war in Bosnia, the final thesis viva (thesis defense) scheduled for May 1992 in Sarajevo was not held.

University of Sarajevo, Bosnia & Herzegovina B.Sc., Oct 1982 - Dec 1986

Faculty of Electrical Engineering, Department of Computer Science.

 Degree included 2 years of electrical engineering and 2 years of computer science. Graduated second in class; recipient of the Silver Badge university award for the excellence in academic achievements. Thesis topic was in a domain of relational databases. Advisor: Prof. Suad Alagic.

PROFESSIONAL MEMBERSHIP

ACM SIGGRAPH and IEEE.

OTHER PROFESSIONAL ENGAGEMENTS & SERVICE

- **2019 2020**: (1) Member of the Conference Committee, IEEE Conference on Virtual Reality and 3D User Interfaces (IEEE VR) 2020, and Chair of the Awards Committee.
- 2019: (1) Member of the International Program Committee of the ACM Spatial User Interaction 2019; (2) Member of the Program Committee of the VRST 2019; (3) Member of Program Committee of the International Symposium on Visual Computing (ISVC) 2019; (4) Reviewer for the PLOS ONE journal; (5) Reviewer for the Natural Sciences and Engineering Research Council of Canada (Canadian government agency that provides grants for research in the natural sciences and in engineering); (6) Reviewer for the ACM International Conference on 3D Web Technology (Web3D); (7) Reviewer for the Virtual Reality Journal, Springer; (8) Co-chair of the User Experience Working Group, Web3D Consortium.
- 2018 2019: (1) Member of the Program Committee and reviewer for IEEE Conference on Virtual Reality and 3D User Interfaces (IEEE VR) 2019.
- 2018: (1) member of the International Program Committee and reviewer for ACM Spatial User Interaction (SUI) 2018; (2) Member of the Program Committee and reviewer for ACM Symposium on Virtual Reality Software and Technology (VRST) 2018; (3) member of the

Program Committee and reviewer for IEEE International Conference on Artificial Intelligence and Virtual Reality (AIVR); (4) Member of the Program Committee and reviewer for the ACM Web3D - International Conference on 3D Web Technology; (5) Reviewer for the Natural Sciences and Engineering Research Council of Canada (Canadian government agency that provides grants for research in the natural sciences and in engineering); (6) Reviewer for the ACM Conference on Human Factors in Computing Systems (CHI).

- **2017**: (1) Reviewer for the PLOS ONE journal; (2) Member of the International Program Committee and reviewer for the ACM Spatial User Interaction (SUI) 2018; (3) Reviewer for the International Journal of Human-Computer Interaction (IJHCI).
- 2016: (1) Reviewer for the IEEE Symposium on 3D User Interfaces (3DUI) 2017; (2) Reviewer for the the International Journal of Human-Computer Interaction (IJHCI); (3) Member of the Selection Committee for Internet2 Hololens Competition; (4) Reviewer for the 15th IEEE International Symposium on Mixed and Augmented Reality (ISMAR) 2016; (5) co-Chair for the Virtual Reality area, 12th International Symposium on Visual Computing (ISVC'16); (6) Mentor for IEEE VR 2016 Doctoral Consortium; (7) Reviewer for the ACM Conference on Human Factors in Computing Systems (CHI); (8) Reviewer for the IEEE Transactions on Visualization and Computer Graphics (IEEE TVCG) journal.
- **2015 2016**: (1) Member of the SECNAV Innovation Initiative on Virtual Environments; (2) Member of Program Board of the 10th International Conference on Augmented Cognition, part of Human-Computer Interaction International (HCII) 2016 conference.
- 2015: (1) Reviewer for the IEEE VR 2016 conference; (2) Reviewer for the ACM CHI 2016 conference; (3) Member of the International Program Committee and reviewer for the International Conference on Artificial Reality and Telexistence (ICAT) 2015; (4) Reviewer for the Journal of Defense Modeling and Simulation (JDMS).
- 2014 2015: (1) Member of the Conference Committee of the IEEE Conference on Virtual Reality (IEEE VR) 2015, Exhibition co-chair; (2) Member of the Program Board and session chair of the 9th International Conference on Augmented Cognition, part of Human-Computer Interaction International (HCII) 2015 conference.
- **2014:** (1) Reviewer for the Natural Sciences and Engineering Research Council of Canada (Canadian government agency that provides grants for research in the natural sciences and in engineering).
- 2013 2014: (1) Member of the Conference Committee and reviewer for the IEEE Conference on Virtual Reality (IEEE VR) 2014, Exhibition co-chair; (2) Member of the Program Board of the 8th International Conference on Augmented Cognition, part of Human-Computer Interaction International (HCII) 2014 conference.
- 2013: (1) Session Chair for the Human-Computer Interaction International (HCII 2013) conference, Augmented Cognition session; (2) Member of the Program Committee and reviewer for the International Conference on Artificial Reality and Telexistence (ICAT); (3) Reviewer for the IEEE Transactions on Visualization and Computer Graphics (IEEE TVCG) journal.
- **2012 013**: (1) Member of the Conference Committee of the IEEE Conference on Virtual Reality (IEEE VR) 2013, Exhibition co-chair;
- **2012:** (1) Reviewer for the IEEE Transactions on Visualization and Computer Graphics (IEEE TVCG) journal.
- 2011 2012: (1) Member of the Conference Committee of the IEEE Conference on Virtual Reality (IEEE VR) 2012, Exhibition co-chair; (2) Reviewer for the ACM SIGCHI Conference on Human Factors in Computing Systems
- **2011:** (1) Member of the Program Committee and reviewer for the International Conference on Artificial Reality and Telexistence (ICAT).
- **2010:** (1) Reviewer for the Presence: Teleoperators and Virtual Environments journal, MIT Press.; (2) Reviewer for The International C2 Journal.

- **2009:** (1) Reviewer for the Presence: Teleoperators and Virtual Environments journal, MIT Press.; (2) Book reviewer for the Oxford Press Books.
- **2008:** (1) Reviewer for the International Conference on Artificial Reality and Telexistence (ICAT); (2) Reviewer for The International C2 Journal.
- **2007:** (1) Reviewer for the International Conference on Artificial Reality and Telexistence (ICAT).
- **2006:** (1) Reviewer for the Presence: Teleoperators and Virtual Environments journal, MIT Press.; (2) Reviewer for the International Conference on Artificial Reality and Telexistence (ICAT); (3) Reviewer for the IEEE Visualization conference.
- **2005**: (1) Reviewer for the Presence: Teleoperators and Virtual Environments journal, MIT Press.; (2) Reviewer for the International Conference on Artificial Reality and Telexistence (ICAT); (3) Reviewer for the IEEE Visualization conference.
- 2004: (1) Reviewer for the International Conference in Central Europe on Computer Graphics, Visualization and Computer Vision (WSCG'2005); (2) Member of steering committee and consultant for Megaconference Jr.; (2) Reviewer for IEEE Virtual Reality 2004 and 2005 conferences.
- 2003: (1) Member of steering committee and consultant for Megaconference Jr.; (2) Reviewer for IEEE Virtual Reality 2004 and 2005 conferences; (2) Chairperson for the Internet2 Application Quality of Service (QoS) Needs Design Team.
- 2002: (1) Chairperson for the Internet2 Application Quality of Service (QoS) Needs Design
- **2001:** (1) Chairperson for the Internet2 Application Quality of Service (QoS) Needs Design Team.
- **2000:** (1) Reviewer for the Eurographics Workshop on Rendering EGRW 2000; (2) Reviewer for International Conferences in Central Europe on Graphics, Visualization Interactive Digital Media, Czech Republic; (3) Chairperson for the Internet2 Application Quality of Service (QoS) Needs Design Team.
- 1999: (1) Coordinator for the best paper selection at "Virtual Reality Software and Technology VRST'99" conference sponsored by ACM SIGGRAPH and SIGCHI, London, December 1999.;
 (2) Reviewer for International Conferences in Central Europe on Graphics, Visualization Interactive Digital Media, Czech Republic.
- 1998: (1) Reviewer for International Conferences in Central Europe on Graphics, Visualization Interactive Digital Media, Czech Republic.
- **1996:** (1) Reviewer and a member of the Organization Committee for FIVE PhD Symposium, Geneva, Switzerland, October 1996, FIVE (Framework for Immersive Virtual Environments), ESPRIT Working Group 9122.

AWARDS

- Recipient of a NSP Special Act Award in 2006 for the research efforts in support of the US Marine Corps training domain.
- Recipient of the Silver Badge of the University of Sarajevo award for excellence in academic achievements (1986).

PUBLICATIONS

Sadagic, A., Attig, J., Gibson, J., Rashid, F., Arthur, N., Yates, F., and Tackett, C. (2019). *Designing VR and AR Systems with Large Scale Adoption in Mind*, International Symposium on Visual

Computing (ISVC) 2019.

Yamashita de Moura, D. and Sadagic, A. (2019). *The Effects of Stereopsis and Immersion on Bimanual Assembly Tasks in a Virtual Reality System*, IEEE Conference on Virtual Reality and 3D User Interfaces (IEEE VR) 2019.

Sadagic, A. (2016). *Design and Choice of Visual Display Solutions in the Training Domain*, IEEE Computer Graphics and Applications, Special Issue: Defense Applications, Vol. 36, No. 6, pp. 18-25, 2016.

Attig, J. and Sadagic, A. (2016). *Virtual Part-task Trainer for Close Air Support Leveraging COTS*, Interservice/Industry Training, Simulation, and Education Conference (I/ITSEC-2016), Orlando, FL.

Greunke, L. and Sadagic, A. (2016). *Taking Immersive Leap in Training of Landing Signal Officers*. IEEE Transactions on Visualization & Computer Graphics, Vol.22, No. 4, pp. 1482-1491, Apr 2016.

Greunke, L. and Sadagic, A. (2016). *Taking Immersive Leap in Training of Landing Signal Officers*. IEEE VR 2016, Greenville, SC.

Sadagic, A. (2016). *Validation of Intelligent Agents in Learning and Training Systems: Why Should We Care?*, IEEE Workshop on Virtual Humans and Crowds for Immersive Environments, Greenville, SC, March 2016.

Sadagic, A., and Yates, F. (2015). *Large Scale Adoption of Training Simulations: Are We There Yet?*. Interservice/Industry Training, Simulation, and Education Conference (I/ITSEC-2015), Orlando, FL.

Sadagic, A. (2013). Next Generation of Physical Training Environments: Bringing in Sensor Systems and Virtual Reality Technologies, HCI International 2013, Las Vegas, NV.

Kölsch, M., Sadagic, A., Wachs, J. (2013). *Visual Analysis and Filtering to Augment Cognition*, HCI International 2013, Las Vegas, NV.

Sadagic, A., Kölsch, M., Welch, G., Basu, C., Darken, C., Wachs, J.P., Fuchs, H., Towles, H., Rowe, N., Frahm, J.-M., Guan, L., Kumar, R., Cheng, H. (2013), *Smart Instrumented Training Ranges: Bringing Automated System Solutions to Support Critical Domain Needs*, The Journal for Defense Modeling and Simulation (JDMS), Vol. 10 No 3, Jul 2013.

Sadagic, A. (2010). *Validating Visual Simulation of Small Unit Behavior*. Interservice/Industry Training, Simulation, and Education Conference (I/ITSEC-2010), Orlando, FL. Best Paper award nomination.

Rowe, N., Houde, J., Kolsch, M., Darken, C., Heine, E., Sadagic, A., Basu, C., and Han, F. (2010). *Automated Assessment of Physical-Motion Tasks for Military Integrative Training*. 2nd International Conference on Computer Supported Education - CSEDU 2010, Valencia, Spain.

Sadagic, A., Welch, G., Basu, C., Darken, C., Kumar, R., Fuchs, H., Cheng, H., Frahm, J.M., Kolsch, M., Rowe, N., Towles, H., Wachs, J., and Lastra, A. (2009). *New Generation of Instrumented Ranges: Enabling Automated Performance Analysis*. In Proceedings of 2009 Interservice/Industry Training, Simulation, and Education Conference (I/ITSEC-2009), Orlando, FL. Honorable mentioned for the Best Paper award.

- Sadagic, A. (2007). The Deployment and Use of Virtual Training Simulations: What Does It Take to Serve the Needs of Majority of Its Users? New Learning Technologies Orlando 2007 SALT Conference, Orlando, FL, Jan 31 Feb 2, 2007.
- Sadagic, A. and Darken, R. (2006). *Combined Arms Training: Methods and Measures for a Changing World*, NATO workshop Virtual Media for Military Applications, US Military Academy, West Point, NY, 13-15 Jun 2006.
- Towles, H., Chen, W.-C., Yang, R., Kum, S.-U., Fuchs, H., Kelshikar, N., Mulligan, J., Daniilidis, K., Holden, L., Zeleznik, B., Sadagic, A. and Lanier, J. (2002). *3D Tele-Immersion Over Internet2*, International Workshop on Immersive Telepresence (ITP2002), Juan Les Pins, France, Dec 2002.
- Sadagic, A., Towles, H., Holden, L., Daniilidis, K., Zeleznik, B. (2001). *Tele-immersion Portal: Towards an Ultimate Synthesis of Computer Graphics and Computer Vision Systems*, 4th Annual International Workshop on Presence, Philadelphia, USA, May 2001.
- Sadagic, A., Towles, H., Lanier, J., Fuchs, H., van Dam, A., Daniilidis, K., Mulligan, J., Holden, L. and Zeleznik, B. (2001). *National Tele-Immersion Initiative: Towards Compelling Tele-Immersive Collaborative Environments*, Medicine Meets Virtual Reality conference, Newport Beach, CA, Jan 2001.
- Sadagic, A. and Slater, M. (2000). *Dynamic Polygon Visibility Ordering for Head-Slaved Viewing in Virtual Environments*, Computer Graphics Forum journal, Vol. 19, No. 2, June 2000.
- Slater, M., Sadagic, A., Usoh, M., and Schroeder, R. (1999). *Small Group Behaviour in a Virtual and Real Environment: A Comparative Study*, Presence: Teleoperators and Virtual Environments, Vol. 9, No. 1, Feb. 2000.
- Steed, A., Slater, M., Sadagic, A., Tromp, J. and Bullock, A. (1999). *Leadership and Collaboration in Virtual Environments*, IEEE Virtual Reality, Houston, Mar 1999.
- Sadagic, A. (1999). *Efficient Image Display for Head-Slaved Viewing of Virtual Environments*, Ph.D. Thesis, University College London, London, Mar 1999.
- Tromp, J., Steed, A., Frecon, E., Bullock, A., Sadagic, A. and Slater, M. (1998). *Small Group Behaviour in the COVEN Project*, IEEE Computer Graphics and Applications, 18(6), 53-63, 1998.
- Slater, M., Sadagic, A., Usoh, M., Schroeder, R. (1998). *Small Group Behaviour in a Virtual and Real Environment: A Comparative Study*, BT Workshop on Presence in Shared Virtual Environments, London, Jun 1998.
- Mehic, N., Sadagic, A. and Kokanovic, K. (1992). Development of the PROGRAPH II on DEC Platform, DECSYM 1992, Turkey, 1992.
- Mehic, N., Fazlic, E., Sadagic, A. and Kokanovic, K. (1991). *The Prograph II Graphics System*, 13th International Conference "Information Technology Interface" ITI 1991, Cavtat, Yugoslavia, 1991.
- Sadagic, A. (1991). *The Architecture and Development of PHIGS Graphics Standard for Graphics Workstation PROGRAPH II*, Master Thesis, Dept. of Computer Science, Faculty of Electrical Engineering, University of Sarajevo, Nov 1991.

Sadagic, A. and Ibrahimbegovic, O. (1990). *High level, interactive, dynamic graphics standard? That is PHIGS*, 14th International Symposium on Information Technologies, Sarajevo - Jahorina 1990, Yugoslavia, 1990.

Sadagic, A. and Ibrahimbegovic, O. (1990). *About an Implementation of PHIGS*, The Fourth International Conference on Computer Graphics, YUGRAPH 1990, Dubrovnik, Yugoslavia, 1990.

Kapetanovic, A. and Sadagic, A. (1989). *The Differences Between PHIGS and GKS Graphics Standards*, 13th International Symposium on Information Technologies, Sarajevo - Jahorina 1989, Yugoslavia, 1989.

PRESENTATIONS, TUTORIALS, PANELS, POSTERS, WORKSHOP PAPERS, CONCEPT PAPERS, INVITED TALKS

Sadagic, A., Rizzo, A., Kaufmann, H., Bliss, J., Johnsen, K., and Lok, B. (2018), Getting Close to Domain Users: VR and AR in Support of Application Domains, Panel, IEEE VR 2018.

Sadagic, A. (2018). Additive Manufacturing in Naval Domain: Large Scale Adoption and Innovation by Masses of Domain Users, MOVES Academic Working Group - MAWG, Monterey, CA, May 2018 (presentation).

Sadagic, A. and Brutzman, D. (2017). Additive Manufacturing (AM) Research and Initiatives at NPS, MOVES Academic Working Group - MAWG, Monterey, CA, May 2017 (presentation).

Sadagic, A. (2016), *Student Thesis Research at NPS*, USMC M&S Technology Showcase, Quantico, VA, 4(2), 13 Oct 2016.

Sadagic, A., and Denney, M. (2016). *Computer Supported Training Solutions: Discussion of a New Framework for Effective Development and Deployment*, Journal of Cyber Security and Information Systems, 4(2), June 2016 (article).

Sadagic, A. and Brutzman, D. (2016). *CAD Interoperability for Navy Reuse in 3D Printing, Maintenance and Training*, MOVES Academic Working Group - MAWG, Monterey, CA, May 2016 (presentation).

Sadagic, A. (2013). Large-Scale Adoption of Technical Solutions. Case study: Virtual Training Simulations & Game-Based Systems, Tutorial given during E-week at Naval Postgraduate School, Mar 2013 (tutorial).

Sadagic, A. (2012). *Tangible Virtual Humans: Meet Your New Role-players*, MOVES Research and Education Summit, Jul 2012 (presentation).

Sadagic, A. (2012). *Validation of Virtual Humanoid Intelligent Agents in Virtual Reality Systems*, IEEE VR 2012, Poster session, Orange County 2012. (poster).

Sadagic, A. (2011). *Deconstructing Game-based Systems: What are They? What Really Matters?*. Tutorial presented at Interservice/Industry Training, Simulation, and Education Conference (I/ITSEC-2011), Orlando, FL (conference tutorial).

Sadagic, A., and Whitton, M. (2011). *Understanding What Affects Our Experiences in Virtual Environments: Basic Concepts & Definitions*, Marine Corps Warfighting Laboratory Workshop "Physiological Metrics of Immersion", San Diego, Oct 2011 (paper).

Sadagic, A. (2011). *Are We Ready for Automated Training Management Systems on Physical Ranges?*, MOVES Research and Education Summit, Jul 2011 (presentation).

Sadagic, A. (2010). *Deconstructing Game-based Systems: What are They? What Really Matters?*. Tutorial presented at Interservice/Industry Training, Simulation, and Education Conference (I/ITSEC-2010), Orlando, FL (conference tutorial).

Sadagic, A. (2010). New Generation of Physical Ranges for Infantry Training: Bringing in Sensor Systems and Virtual Reality Technologies, MOVES Research and Education Summit, July 2010 (presentation).

Sadagic, A. (2009). *BASE-IT: Pushing the Boundaries Towards a New Generation of Instrumented Ranges*, MOVES Research Summit, Monterey, CA, July 2009 (presentation).

Sadagic, A., Cheng, H., and Fuchs, H. (2009). *Behavioral Analysis and Synthesis for Intelligent Training*, USMC Range Instrumentation Working Group, Princeton, NJ, July 2009 (presentation).

Sadagic, A. (2009). *Large Scale Adoption Issues for Serious Games*, Invited I/ITSEC Tutorial presented at the Modeling and Simulation Symposium (MMS), 23-27 March 2009, San Diego, CA (tutorial).

Sadagic, A. (2008). *Virtual Training Simulations & Game-Based Systems: Large-Scale Adoption Issues*, Tutorial, I/ITSEC 2008 conference, Orlando, FL (conference tutorial).

Sadagic, A. (2008). New Generation of Instrumentation for Training Ranges: Automated Behavior Analysis for Full Spectrum Operations in Urban Terrain, Urban Operations M&S Summit VIII, Monterey, CA, Oct 2008.

Sadagic, A. (2008). Virtual Training Simulations and Game-Based Systems: Large-Scale Adoption Issues, Accelerated Learning workshop: Institute for Defense Analysis in Alexandria, Virginia, July 2008.

Sadagic, A. (2008). *Behavioral Analysis and Synthesis for Intelligent Training*, MOVES Open House, Monterey, CA, July 2008.

Sadagic, A. (2007). Virtual Training Simulations & Game-Based Systems: Large-Scale Adoption Issues, Tutorial, I/ITSEC 2007 conference, Orlando, FL (conference tutorial).

Sadagic, A. (2007). How Well Do We Serve the Needs of the Majority of Users? - The Reflections From Our User Studies on the Use of Technological Solutions in Learning and Training, CENIC 2007 annual conference, March 2007 (presentation).

Brutzman, D., Sadagic, A. and Nortbraten, T. (2007). Extensible 3D (X3D) Earth Technical Requirements Workshop Summary Report, NPS, February 2007 (report).

Sadagic, A. and Ciavarelli, T. (2007). *Learning and Training in Game-Based Systems*, New Learning Technologies Orlando 2007 SALT Conference, Orlando, FL, Jan 31 - Feb 2, 2007 (conference tutorial).

Sadagic, A. (2006). Evaluation of Training Effectiveness: Tactical Decision Making Systems and Training of Instructors, MOVES Open House, Aug 2006 (presentation).

Sadagic, A. (2006). *Videoconferencing as a tool for advanced learning and training methodologies*, CENIC 2006 conference, March 13-15, 2006, Oakland, CA.

Sadagic, A. (2005). Know your Users: Reflections from Field Visits to MCGACC, Twenty Nine Palms, MOVES Open House, Aug 2005.

Sadagic, A. and Recesso, A. (2004). K-12 section of ViDe Videoconferencing Cookbook Version 4, 2004.

Sibley, R. and Sadagic, A. (2003). *Emerging Technologies as Enablers of Advanced Teaching and Learning Practice*, National Educational Computing Conference - NECC 2003, Seattle WA, July 2003.

Sadagic, A. (2002). *Videoconferencing in K-12 Education: Moving it from a Promise to Successful Future Practice*, Megaconference IV, International H.323 tele-conference, December 2002.

Sadagic, A. (2002). Why and how to use videoconferencing tools to support project activities: Case study of Imagining the Future (ITF) project, invited talk given at the TLI-TSC Distance Education Solutions, Westchester Marriot, Tarrytown, NY, 6 November 2002.

Sadagic, A. (2002). *Imagining the Future, Student-Centered Exploration of Learning Applications and Systems*, National Educational Computing Conference – NECC 2002, San Antonio, TX, June 2002.

Sadagic, A. (2002). Videoconferencing as an Enabling Tool for Project Activities: a Case Study of 'Imagining the Future' Project, SURA/ViDe 4th Annual Digital Video Workshop, University of Alabama at Birmingham, April, 2002.

Teitelbaum, B. and Sadagic, A. (2002). *Internet2 QoS and Video: Sharing Responsibility to Overcome Congestion-Related Performance Problems*, SURA/ViDe 4th Annual Digital Video Workshop, University of Alabama at Birmingham, April 2002.

Sadagic, A. (2001). *ThinkQuest: Students Projects with Global Reach*, Megaconference III, International H.323 tele-conference, October 2001.

Sadagic, A. (1999). *National Tele-Immersion Initiative: Visions and Challenges*, invited seminar talk given at the University College London, Department of Computer Science, London, UK, December 1999 (talk)

Sadagic, A. (1999). *National Tele-Immersion Initiative: Visions and Challenges*, keynote speaker at the Second Workshop on Virtual Reality in Sweden: Future Directions in Virtual Environments II, Stockholm, Sweden, November 1999 (invited talk).

OTHER: COMMUNITY SERVICE

- 2014 2016: Advisory Board member for Amavitae.
- 2009 2011: Member of the Board of Directors for Public Learning Media Laboratory, Inc. K-12 educational non-profit corporation.
- 2008 present: Volunteer for Carmel Sunset Center (501(c)3 non-profit corporation). Gained a title of the Ambassador of Carmel Sunset Center.
- 2007 present: Volunteer for Carmel Bach Festival (non-profit).
- Volunteer photographer for community events organized in the area.