## Joseph Barjis /PhD, Associate Professor, US Citizen/

# SUMMARY

### ○ Current Job:

Associate Professor of Enterprise Engineering/ Modeling and Simulation, Delft University of Technology

### Education:

- 4 years post-Doctorate in Information Systems
- 5 years PhD in Computer Information Systems (GPA 100%)
- 5 years combined BSc & MSc in Computer Science "With Honors" (Red Diploma) and governmental "Medal of Excellence", (GPA 99%)

### • Publication:

Published in high impact journals such as Enterprise Information Systems (Taylor & Francis, Impact Factor of 3.684), Information Systems Frontiers (Springer, Impact Factor 0.9), SIMULATION - Transaction of The Society for Modeling and Simulation International (Impact Factor 0.8), and Journal of Enterprise Transformation. Over 20 journal articles and editorials; 16 book chapters; 14 edited books (proceedings); 9 Special Issues Guest Editor; over 60 papers in fully peer refereed conference proceedings

### o Research:

 Areas: systems engineering, enterprise engineering, service systems design, healthcare systems, information systems design, business engineering, healthcare modeling and simulation, business process analysis and design, enterprise & organizational modeling and simulation, methodology and methods design, electronic health records (EHR) systems

- Funded Projects: Worked on numerous funded projects and participated in numerous proposal writing.

- Supervision: Supervised many BSc projects/capstone, over 30 MSc theses, currently 3 PhD researchers

### • Teaching:

Ten years of fulltime teaching experience at doctoral, graduate and under graduate levels; Taught regular courses on-campus and online courses (certified online instructor); Developed new courses

### $\circ$ Service:

- Founder and current chair of the Special Interest Group on Modeling And Simulation of the Association for Information Systems (www.AIS-SIGMAS.org)
- Founder and steering chair of the International Workshop on Enterprise and Organizational Modeling and Simulation - EOMAS (<u>www.EOMAS.org</u>)
- SIMULATION: Transactions of The Society for Modeling and Simulation International Associate Editor
- Decision Analytics (Springer Journal) Associate Editor
- Journal of Information System Security Editorial Board Member
- International Journal of Secure Software Engineering Editorial Board Member
- Editorial Board Member of the Society for Computer Simulation "Modeling and Simulation Newsletter"
- Member of international program committees for numerous international conferences
- Served on numerous PhD examination and grants review committees

### • Awards/Recognition/Invited Lectures:

- Invited lecturer, University of Granada, Spain, May 2012
- Invited lecturer, Tokyo Institute of Technology, Japan, March 2012
- Visiting professor, Czech Technical University in Prague, November 2011
- Executive Board Member of the Enterprise Engineering Institute, The Netherlands, October 2011
- Invited speaker, Symposium for Healthcare Advancements in Research and Practice, April 2011, USA
- The Best Paper Award, 2011 Spring Simulation Multiconference (SpringSim'11), Emerging M&S Applications in Industry and Academia Symposium (EAIA), April 4 - 7, 2011, Boston, MA
- Invited speaker, Second Symposium on Software Engineering (August 5-6, 2010, Bogota, Colombia)
- Invited speaker, BEM (Management School Bordeaux), March 2009, France
- The Best Presented Paper Award, MSVVEIS 2007
- The World Order of Science-Education-Culture, 2002
- The Best Paper Award, "Summer Computer Simulation Conference", 1999
- The Medal "Excellence in Study", 1991 (governmental medal)
- The Best Master Thesis Award, 1991

# **EDUCATION**

## Degrees

1998- 2002:	Post-Doctorate in Information Systems, Delft University of Technology (The Netherlands).	
1991- 1996:	<b>PhD</b> in Computer Information Systems, Moscow Technical University of Communications and Informatics (Russia) – PhD with an overall <b>GPA of 100%</b> .	
1986- 1991:	<b>BSc &amp; MSc</b> (combined 5 year program) in Computer Science, Tashkent University of Information Technologies (Uzbekistan) – Diploma "With Honors" (Red Diploma) and an overall <b>GPA of 99%</b> and governmental "Medal of Excellence".	
Certificates		
2012:	<b>Enterprise Engineering:</b> DEMO Methodology Master certificate, awarded by the Enterprise Engineering Institute (The Netherlands). DEMO stands for "design & engineering methodology for organizations" and is used by a network of academicians and professionals (www.demo.nl)	
2011:	Enterprise Engineering: DEMO Methodology Professional certificate, awarded by the Enterprise Engineering Institute (The Netherlands)	
2005:	<b>Facilitating Learning Online (FLO):</b> I followed a professional course designed for instructors/professors of the University System of Georgia (35 colleges and universities) that prepared them to teach online courses; a kind of online teaching certification course.	
1991- 1995:	<b>Teacher Certificate:</b> "Teacher of Russian Language" from Moscow Technical University of Communications and Informatics (Russia). Received a certificate after following 648 hours course of Russian language and literature and passed the final examination with the grade <b>"Excellent"</b> (100%).	
Continuously:	Self-education and self-instruction in literature, poetry and foreign languages	

# TEACHING

2008 - present:	Associate Professor of Systems Engineering, Modeling & Simulation, Delft University of
	Technology (The Netherlands). I teach graduate students and supervise MSc theses.

- 2003- 2007: **Assistant Professor** of Information Technology, Georgia Southern University (USA). I was teaching primarily undergraduate students.
- Since 2004: **Member of the Graduate Faculty** officially appointed (where it was required) by my previous and current institutions.
- <sup>2005 2008:</sup> **Facilitating Learning Online** I taught the FLO course to the instructors/professors of the University System of Georgia (35 colleges and universities) that prepare them to facilitate online courses. This was a kind of certification course for online teaching
- Internationally: As an invited professor, I delivered research seminars or compact courses in my research field primarily for graduate/doctoral students in the following universities: Tokyo Institute of Technology (Japan), Auburn University (USA), University of Granada (Spain), BEM (Management School Bordeaux) (France), Czech Technical University in Prague (Czech Republic)

# RESEARCH

## **Research Interests**

 Enterprise engineering, service systems design, healthcare systems, systems engineering, information systems design, business engineering, healthcare modeling and simulation, business process analysis and design, enterprise & organizational modeling and simulation, methodology and methods design, electronic health records (EHR) systems

# **Funded Projects**

2010-2011: At Delft University of Technology, worked as a Systems Engineering expert in the project "Integrated Water Resources Management", total cost of the project €285K, funded by the Dutch Government. The project was executed by Royal Haskoning. My role was of systems engineering expert.

- 2000- 2002: At Delft University of Technology, worked as a senior researcher and co-supervised PhD students within the research project "Communicative Action based Requirements Engineering (CARE)", €241K, funded by a grant from NWO (Nederlandse Organisatie voor Wetenschappelijk Onderzoek Netherlands Organization for Scientific Research) (NWO Grant # 612-62-005). Successful work of this project resulted in numerous scientific papers and Ph.D. research proposals.
- 2011: FP7 Funding Proposal (assessed, but not funded). A funding proposal "ELEMENTA (Essential eLements of Enterprise Modeling for the Engineering of the Next-generation Technology of Adaptive case management systems)" was submitted to "The Framework Programmes for Research and Technological Development, in the series of funding programmes created by the European Union. The proposal total amount was **€626K**. I was a participant in this joint funding proposal and, if were funded, solely responsible for **€272K** (two hundred and seventy two thousand Euro) for a duration of 18 months.
- 2007: NSF Grant (assessed, but not funded): in the capacity of site PI, we submitted a grant proposal to the NSF program "Cyberinfrastructure Training, Education, Advancement, and Mentoring for Our 21st Century Workforce (CI-TEAM)" for a total budget of \$250K. The project was GRASP-IT (Gratifying, Redeeming, Appealing, Societal Partnerships in Information Technology) and involved several partners. Although the proposal was not granted, the experience of writing an NSF grant proposal was enormous.

## SERVICE

# **Professional Organizations**

- Founder and current chair of the Special Interest Group on Modeling & Simulation of the Association for Information Systems (<u>http://www.AIS-SIGMAS.org/</u>).
- Founder and steering chair of the International Workshop on Enterprise and Organizational Modeling and Simulation (<u>http://www.EOMAS.org</u>). This is a fully peer refereed International workshop with proceedings published in a book by Springer.

# **Journal Editorial Boards**

- SIMULATION: Transactions of The Society for Modeling and Simulation International -Associate Editor
- o Decision Analytics (Springer Journal) Associate Editor
- $_{\odot}$  Journal of Information System Security Editorial Board Member
- o International Journal of Secure Software Engineering Editorial Board Member
- Modeling and Simulation Newsletter of the Society for Modeling & Simulation International (established in 1952) – Member of the Editorial Board
- Reviewer: Business Process Management Journal, Enterprise Information Systems, Science of Computer Programming; Bioinformatics, Journal of Database Management

### **Journal Guest Editors**

- Barjis, J., Gupta, A., & Sharda, R. (2011). Information System Frontiers. Special Issue on "Modeling Knowledge Work and Communication in Networked Enterprises", (waiting print)
- Barjis, J., Verbraeck, A. (2011). International Journal of Internet and Enterprise Management. Special Issue on "Enterprise Design and Engineering", Vol. 7, No 1.
- Barjis, J., & Fosso Wamba, S. (2010). Pacific Asia Journal of the Association for Information Systems. Special Issue on "RFID Applications and Potentials", Vol. 2, No. 2.
- Barjis, J. (2010). SIMULATION: Transactions of The Society for Modeling and Simulation International. Special Issue on "Modeling and Simulation in Healthcare", August/September 2010, Vol. 86, No. 8-9
- Chatfield, A.T., Barjis, J., Fosso Wamba, S. (2010). Business Process Management Journal. Special Issue on "Modeling and Simulation of RFID Applications and its Business Impacts", Vol. 16, No 6.
- o Barjis, J., Verbraeck, A. (2010). Business Process Management Journal. Special Issue on

"Enterprise Modeling and Simulation", Vol. 16, No 5.

- Albani, A., Barjis, J., & Winter, R. (2010). Enterprise Modelling and Information Systems Architectures - An International Journal. Special Issue on "Methodologies for Enterprise and Organizational Engineering", Vol. 5 No. 1.
- Barjis, J., Verbraeck, A. (2008). International Journal of Simulation and Process Modelling. Special Issue on "Enterprise Modeling & Simulation in a Broader Context", Vol. 4, No. 3/4
- Barjis, J., Ultes-Nitsche, U., Augusto, J.C. (2007). Science of Computer Programming. Special Issue on "Increasing Adequacy and Reliability of EIS" Vol. 65, No 1.

# Conferences

- $\circ$  General Chair:
  - International Workshop on Enterprise & Organizational Modeling and Simulation (EOMAS) <u>http://www.EOMAS.org</u>
    - EOMAS 2011, June 20-21, 2011, London, UK
    - EOMAS 2010, June 7-8, 2010, Hammamet, Tunisia
    - EOMAS 2009, June 8-9, Amsterdam, Netherlands
    - EOMAS 2008, June 16-17, Montpellier, France
  - International Workshop on Modeling, Simulation, Verification and Validation of Enterprise Information Systems (MSVVEIS):
    - MSVVEIS 2007: June 12-13, 2007 Funchal, Madeira, Portugal
    - MSVVEIS 2006: May 22-23, 2006 Paphos, Cyprus
    - MSVVEIS 2005: May 24-25, 2005 Miami, FL, USA

#### o Organizing Committees Chair:

- Enterprise Engineering Working Conference, May 7-11, 2012, Delft, Netherlands
- The 3rd IFIP WG8.1 Working Conference on the Practice of Enterprise Modelling (PoEM2010), November 8-9, 2010, Delft, Netherlands
- The 2nd Practice-driven Research on Enterprise Transformation (PRET 2010) working conference, November 10-11, 2010, Delft, Netherlands
- The 5th Trends in Enterprise Architecture Research (TEAR2010) workshop, November 12, 2010, Delft, Netherlands
- The Seventh International Workshop on the Language-Action Perspective on Communication Modeling (LAP'2002) June 12-13, 2002, Delft, Netherlands.
- Symposium on Business Process within the 4th International EUROSIM Congress 2001, June 26 - 29, 2001, Delft, Netherlands.
- Program Committee Member:
  - In a dozen of conferences served/serve as International Program Committee member

## **Professional Membership**

IEEE Computer Society – full member

Decision Sciences Institute (DSI) - full member

Association for Information Systems (AIS) – academic member

Association for Computing Machinery (ACM) - professional member

Society for Modeling and Simulation International (SCS) - full member

### **MSC/ PHD COMMITTEES & SUPERVISION**

- PhD: Participated in supervision of several PhD candidates; Served in the final doctoral examination committees of PhD candidates
- o MSc: Supervised over 25 MSc theses (each thesis a 6-12 months supervised research)
- BSc: Several dozens of final BSc projects/capstone (each one semester projects work)

## AWARDS/ ACHIEVEMENTS/ RECOGNITION/ INVITED SPEAKER

<sup>2012:</sup> Invited Panel Chair, AIM 2012, May 21-23, Bordeaux, France. Invited to organize and chair a panel on "The Essence of Enterprise Engineering and Transformation"

2012:	<b>Invited Professor</b> , University of Granada (Spain) – Invited as "Internationally Recognized Expert" for one week lecture in a Master Program on "Collaborative Systems and Business Processes", May 13-18, 2012.
2012:	<b>Chairman of Examination Commission,</b> appointed by the Board of the Enterprise Engineering Institute (Netherlands), since May 7, 2012.
2012:	Invited Professor, Tokyo Institute of University (Japan), Department of Industrial and Systems Engineering, March 2012
2011:	Visiting Professor, Department of Software Engineering, Czech Technical University in Prague, November 2012
2011:	<b>Executive Board Member</b> of the Enterprise Engineering Institute (Netherlands), since October 4, 2011.
2011:	Invited Speaker – Symposium for Healthcare Advancements in Research and Practice (SHARP 2.0), April 28-29, 2011, Minnesota State University Moorhead, USA
2011:	<b>The Best Paper Award</b> , 2011 Spring Simulation Multiconference (SpringSim'11), Emerging M&S Applications in Industry and Academia Symposium (EAIA), April 4 - 7, 2011, Boston, MA (awarded to only one paper at EAIA).
2010:	<b>Invited Speaker</b> – An invited speaker for the Second Symposium on Software Engineering (August 5-6, 2010, Bogota, Colombia), organized by Pontificia Universidad Javeriana (Columbia). The speaker participation costs (travel, hotel, registration) were completely sponsored by the conference organizers.
2010:	<b>Invited Lecturer,</b> University of Granada (Spain) – Invited as "Internationally Recognized Expert" for one week lecture in a Master Program on "Collaborative Systems and Business Processes", January 2010.
2009:	<b>Invited Speaker,</b> The Royal Institute of Engineers in the Netherlands, "The Dutch Electronic Medical Record Complexity", The Hague, Netherlands, April 28, 2009. (http://www.kiviniria.net)
2009:	<b>Invited Speaker,</b> BEM (Management School Bordeaux) (France), "Business Process Modeling in Modern Enterprises", Bordeaux, France, March 13, 2009
2007:	The Best Presented Paper Award – "MSVVEIS 2007, June 12-16, Funchal, Madeira - Portugal" (awarded to only one paper).
2006:	<b>Invited Speaker,</b> Georgia Southern University (USA), Cultural Book Club Discussion: "The Kite Runner", hosted and sponsored by the Multicultural Student Center, November 15, 2006 (The Georgia-Anne Daily, November 15, 2006)
2006:	(Nominee) <b>The Award Excellence in Service</b> - nominated for this most prestigious and highest award of Georgia Southern University. The nomination was made by my department.
2005:	<b>Invited Speaker,</b> Georgia Southern University (USA), Center for International Studies, Statesboro, GA, October 25, 2005 (GSU This Week, October 24, 2005,V13, N30)
2005:	<b>Invited Speaker,</b> Georgia Southern University (USA), Center for the Study of International Schooling, (GSU This Week, March 21, 2005, V13, N11)
2002:	The World Order of Science-Education-Culture "In recognition of scientific achievements, scientific publications, and international academic collaboration in the field of Computer Science and Information Systems." April, 19, 2002
1999:	<b>The Best Paper Award</b> , "1999 Summer Computer Simulation Conference (SCSC'99), July 11- 15, 1999, Chicago, Illinois" ( <u>awarded to only one paper</u> ).
1991:	<b>The Medal "Excellence in Study"</b> – "For excellent academic performance during the entire 5- year study (BSc. and MSc.), student leadership and extra curricular activities, serving as chair of the international student organization for 5 subsequent years)".
	This medal was <u>awarded to only one graduate student</u> out of a few hundred students statewide when I was a graduate student at Tashkent University of Information Technologies. This medal has official governmental status.
1991:	The Best Master Thesis Award - my master's thesis won the "Master's Theses Competition on Technical Subjects" among different peer universities and its main contribution was published in a collection of scientific works.

# PUBLICATIONS

Authorship: over 22 journal articles, 16 book chapters, over 60 peer refereed conference papers, a book currently in final stages

Editorship: 9 journal special issues, 14 edited books (conference proceedings);

A complete list of my publications is provided separately

### LANGUAGES

- I fluently speak, read, and write English, Russian and Persian.
- I speak and read basic Dutch.
- $_{\odot}$  I have basic vocabulary of German and Urdu

# **HOBBIES & SPORT**

Reading/reciting poetry, Persian/Russian/English literature; Yoga, Tae-Kwon-Do, Swimming; Traveling and interacting with different people and cultures.