



## Anca-Juliana Stoica

### Selected publications and communications

#### Journal and conference papers

A.J. Stoica, K. Pelckmans, W. Rowe, *System Components of a General Theory of Software Engineering*. In Elsevier Science, Science of Computer Programming, Special Issue on General Theories of Software Engineering, ISSN 0167-6423, Vol. 101, pp 42-65, 2015.

A.J. Stoica, S. Islam, *Integrative Educational Approach Oriented Towards Software and Systems Development*. In International Journal of Engineering Pedagogy (iJEP), Volume 3, Issue 1, pp 36-43, 2013.

A.J. Stoica, P. Babu, P. Stoica, *Quantitative Framework for Managing Software Life-Cycle*. In *The Open Software Engineering Journal*, Bentham Science Publishers Ltd, volume 5, number 1, pp 1-18, 2011.

A.J. Stoica, S. Islam, *Teaching Information and Software Security Courses in Regular and Distance Learning Programs*. In Proceedings IEEE EDUCON Engineering Education Conference, Berlin, Germany, March 13-17, 2013.

A.J. Stoica, S. Islam, *Concurrent View Modeling for Software Risk Management at Early Development Stage*. In: Proceedings International Conference on Theory and Practice in Modern Computing, Lisbon, Portugal, July 17-23, 2012.

A.J. Stoica, S. Islam, *Educational Methods for Software and Systems Development*. In: Proceedings 15<sup>th</sup> International Conference on Interactive Computer Aided Learning, Villach, Austria, September 26-28, 2012.

A.J. Stoica, *Demonstrating Early Value in Software System Projects Using Software and System Models*. In Proceedings 26<sup>th</sup> International Forum on Systems/Software Cost Modeling, USC-CSSE, L.A., USA, Nov. 2011.

A.J. Stoica, M. Nael, *Agile Software Development and ISO/IEC Software Quality Standards: Measuring Economic Benefits and Calculating Quantitative Yields*. In Proceedings. 25<sup>th</sup> International Forum on Systems/Software Cost Modeling, USC-CSSE, L.A., USA, Nov. 2010.

A.J. Stoica, *Exploring Quantitative Yields of Software Engineering Methods in the Software Life-Cycle*. First IEEE International Conference on Exploring Quantifiable IT Yields, EQUITY 2007 Report, Amsterdam, Netherlands, March 2007.

A.J. Stoica, M. Mushabbar, S. Mushabbar Sadiq, *Stakeholder/Value Approach to Integrating System Development Model and Dependability Analysis: CS-GPE Case Study*. Proceedings of the 19<sup>th</sup> International Forum on Software and System Cost Modeling, Los Angeles, U.S.A., Oct 2004.

A.J. Stoica, *An Internet-Intranet Solution for Software System Estimation with Use Cases*. Proceedings of the 18th International Forum on Software Cost Modeling, USC-CSE, USA, Oct 2003.

A.J. Stoica, *Aspects of Building Web Application Systems using the MBASE Approach*. Proceedings of the 15<sup>th</sup> International Forum on Software Cost Modeling, USC-CSE, USA, Oct 2000.

A.J. Stoica, *Facets of Software Development Represented by Model Systems: Analysis and Enhancement*. Proceedings of the 14<sup>th</sup> International Forum on Software Cost Modeling, USC-CSE, USA, Oct 1999.

A.J. Stoica, *A Decisional Framework in Software Design*. Position paper, 21<sup>st</sup> International Conference on Software Engineering, First Workshop on Economics-Driven Software Engineering Research, L.A., USA, May 1999.

A. Stoica, R. Moses, P. Stoica, *Enforcing Positiveness on Estimated Spectral Densities*. Electronic Letters, Vol.29, Issue 23, pp 2009-2011, Nov. 1993.

A. Stoica, D. Barbu, *Study on Validation of Software Cost Estimation Models in University Environment*. Polytechnic Institute of Bucharest Scientific Bulletin- Electrical Engineering, Vol.52, No.1, p.81-88, 1990.

A. Stoica, C. Ioneci, *AI Implementation of Job Shop Scheduling in Production Systems*. Polytechnic Institute of Bucharest Scientific Bulletin- Electrical Engineering, Volume 52, Number 2, 1990.

A. Stoica, *Analysis Methodology for Computer Systems Quality and Competitiveness Evaluation*. Buletinul IPB, Seria Automatica-Calculatoare, Tomul L, p.39-51, 1988.

## **Books, book chapters and lecture notes**

A.J. Stoica, H. Lanshammar, B. Sandblad, *Survey on Optimization and Simulation Software and Associated Teaching Activities*. AFR-Report no 76, Swedish Waste Management Council (AFR), National Library of Sweden, 1995.

A.J. Stoica, H. Lanshammar, B. Sandblad, *Selected Topics on Optimization Techniques and Applications*. AFR-Compendium no.3, Swedish Waste Management Council (AFR), National Library of Sweden, 1995.

G. Wiederhold, D. Beringer, A.J. Stoica, *Tools and Processes for Software*. Lecture notes, CS446, Stanford University Infolab, USA, Fall 1999.

S. Islam, A.J. Stoica, *Software Risk Management Modeling Using Goal-Driven Approach from Early Requirements Engineering*. Book Chapter in *Risk Assessment and Management*, Academy Publish, 2012.

A.J. Stoica, *Software Engineering II – Value-Based Software Engineering*. Course material, Department of Information Technology, Uppsala University, 2015.

A.J. Stoica, *Value-Based Software Engineering*. Compendium, vol. I-II, IT University, Department of Computer and System Sciences (DSV), Kista, Sweden, 2007.

A.J. Stoica, *Software Engineering and Security Architecture – Lecture Notes*, IT University, Department of Computer and System Sciences (DSV), Kista, Sweden, 2004.

A.J. Stoica, *Analytical Methods in Software Engineering Economics*. Compendium, vol. I-II, IT University, Department of Computer and System Sciences (DSV), Kista, Sweden, 2003.

A.J. Stoica, *IT Project Management: Processes, Models, and Tools*. Lecture Notes, Royal Institute of Technology, School of Applied IT, Kista, Sweden, 2000.

A.J. Stoica, *Software Engineering*. Lecture notes, Royal Institute of Technology, School of Applied IT, Kista, Sweden, 2000.

A.J. Stoica, *Software Engineering*. Lecture Notes, Uppsala University, Information Science Dept., Computer and System Science Division, Uppsala, Sweden, Spring 1999.

A.J. Stoica, *Fundamentals of Database Systems*. Lecture Notes, Uppsala University, Information Science Dept., Computer and System Science Division, Uppsala, Sweden, Fall 1998.

A.J. Stoica, *Analytical Methods in Software Engineering Economics*. Lecture notes, Uppsala University, Information Science Dept., Computer and System Science Division, Uppsala, Sweden, Spring 1998.

A.J. Stoica, *Operating Systems and System Programming*. Lecture Notes, Handouts, and Laborations, Uppsala University, ADB Department, Uppsala, Sweden, Fall 1997.

A.Stoica, *Methods and Models for Decision-Making*. (Postgraduate Program Lecture Notes). MIM Press, 1990.

## **Invited talks, seminars, and reports**

A.J. Stoica, *System Components of a General Theory of Software Engineering and Applications*, Invited Docent Lecture, Department of Information Technology, Uppsala University, Oct 2018.

A.J. Stoica, K. Pelckmans, *Dynamic Integration of System Components of a GTSE in Practice*. Invited Talk, TOSE 2016: The 5<sup>th</sup> International Workshop on Theory-Oriented Software Engineering. In conjunction with The 38<sup>th</sup> International Conference on Software Engineering (ICSE 2016), Austin, Texas, USA.

A.J. Stoica, *Aspects of Value-Based and Strategic Software and System Engineering Research*. UPMARC Seminar, Uppsala University, IT Department, Uppsala, Sweden, 2012.

A.J.Stoica, *VB and S\*3 Research: Theory, Frameworks, and Examples*. Invited lecture EEC 6935, Dept. of Electrical and Computer Engineering, University of Florida, Gainesville, USA, 2012.

A.J.Stoica, *System Engineering Cost Estimation Curriculum Development Workshop Debrief*. In 26<sup>th</sup> International Forum on Systems/Software Cost Modeling, USC-CSSE, Los Angeles, USA, 2011.

A.J. Stoica, *Strategies and Challenges in Designing Communication Solutions for Large Scale Public Events: A Holistic Approach*. Seminar at Dept. of Electrical and Computer Engineering, University of Florida, Gainesville, USA, Dec. 2009.

A.J. Stoica, *Early Architectural Model of a Dependable Communication System*. Seminar at Stanford University, Dept. of Electrical Engineering, Information Systems Laboratory, USA, Nov. 2004.

A.J. Stoica, *An Internet-Intranet Solution for Software System Estimation with Use Cases*. CISE Colloquium Speakers, Dept. of Computer and Information Science and Engineering, (CISE),University of Florida, Gainesville, USA, Jan. 2004.

A.J. Stoica, *Applying Methods for Software and System Development*. Invited talk, Dept. of Electrical and Computer Engineering, University of Florida, Gainesville, USA, Spring 2002.

A.J. Stoica, *Model Systems: Analysis and Enhancement*. CISE Colloquium Speakers, Dept. of Computer and Information Science and Engineering (CISE), University of Florida, Gainesville, USA, May 2002.

A.J. Stoica, *A Survey of Software and System Development Methods*. CISE Colloquium Speakers, Dept. of Computer and Information Science and Engineering (CISE), University of Florida, Gainesville, USA, May 2002.

A.J. Stoica, *Project Methods for Software and System Development – An Academic Approach*. Seminar at Royal Institute of Technology, Department of Applied IT, Kista, Sweden, March 2002.

A.J. Stoica, *A Theoretical Decisional Framework for Software Process and Applications*. Technical Report, Uppsala University, Uppsala, Sweden, April 1999.

A.J. Stoica, *Learning and Improvement for Software Engineering Data Analyses*. Tuesday Afternoon Seminars at DoCS, Dept. of Computer Systems, Uppsala University, Sweden, May 28, 1996.

A.J. Stoica, *Some Aspects of Computer Based System Management Optimization*. Tuesday Afternoon Seminars at DoCS, Dept. of Computer Systems, Uppsala University, Sweden, May 21, 1996.

A.J. Stoica, *Trends and Selected Topics from the 29<sup>th</sup> ASILOMAR Conference on Signals, Systems, and Computers*, Pacific Grove, CA, USA, Nov. 1995, Presented to Tuesday Afternoon Seminars at DoCS, Dept. of Computer Systems, Uppsala University, Sweden, Jan. 1996.

A.J. Stoica, *Technical Aspects of Time Series Analysis, Modelling and Prediction*. Högre seminarium i ekonomiska informationssystem, Tekniska Högsskola i Linköping, Sweden, Oct. 14, 1993.

A.J. Stoica, *Studies on Modeling Technical Business Interactions and Networks*. Högre seminarium i ekonomiska informationssystem, Tekniska Högskolan i Linköping, Sweden, Oct. 14, 1993.

A. Stoica, *A Concept for Information Systems Evaluation*. The 4th SEIC (Systems Engineering, Informatics, and Cybernetics) National Symposium, UPB, June 2-3, 1990.

A. Stoica, *Programmable Decisions in Discrete Dynamic Systems*. The CNETAC (Computers, Networks, Telecommunications, and Automatic Control ) Conference, Bucharest, Dec.7-9, 1988.

## **Research contracts and projects with companies and organizations**

A.J. Stoica, M. Mushabbar, S. Mushabbar-Sadiq, *Secure and Reliable Communication System for Large Scale Public Events*. Department of Computer and System Sciences, Stockholm University/Royal Institute of Technology – Ericsson Research EAB/TGL, Kista, Stockholm, 2004.

A.J. Stoica, H. Lanshammar, B. Sandblad, *Educational Development in System Analysis*. Uppsala University, System Analysis Division, Uppsala – Swedish Waste Research Council (AFR), Stockholm, 1994.

P. Stoica, A. Stoica, *Algorithms and Software Programs for the Technological Processes Experimental Modelling and Optimization*. Res. contract University Politehnica of Bucharest (UPB) - Brazi Petrochemical Company, no.8-7-9/1988-1990.

A. Stoica, *Analysis Methodologies for Computer Systems Quality Evaluation – A System Approach*. Res. contract UPB - Computer Enterprise no. 7-6-10/1987.

P. Stoica, A. Stoica, *On-Line and Off-Line Identification Programs*. Research contract UPB – Institute for Automation, no.11-5-2/1985-1986.

A. Stoica, *Technical and Economic Decisions in the Design, Production and Marketing of Computer Systems*. Res. contract UPB - Computer Enterprise no. 9-4-5/1985.