

Dr Miloš Ivanović CV

Personal Data

Full name: Miloš Ivanović
Birthdate: May 11th, 1978.
Birthplace: Kragujevac, Serbia



Education and Academic Degrees

Ph.D. in Computer Science (Numerical Methods): University of Kragujevac, Faculty of Science, October 2010. Dissertation: Smoothed Particle Hydrodynamics – Algorithms Parallelization and Application in Fluid Mechanics
B.Sc. in Physics & Informatics: University of Kragujevac, Faculty of Science, June 2002. (best student in the generation)
High School: "Prva Kragujevačka gimnazija", Kragujevac, 1993 - 1997 (multiple awards in contests in Physics, state level)

Professional Experience

2011-present Assistant Professor, Department of Mathematics and Informatics, Faculty of Science, University of Kragujevac
2009-2011 Teaching and Research Assistant, Department of Mathematics and Informatics, Faculty of Science, University of Kragujevac
2007-2007 Research Associate, Department of Applied Mechanics, Cranfield University, United Kingdom
2006-2007 Research Associate, Institut für Wissenschaftliches Rechnen, TU Braunschweig, Deutschland
2003-2008 Research Associate, Center for Scientific Research of Serbian Academy of Science and Art and University of Kragujevac
2001-2002 Computer Science Teacher, "Druga kragujevačka gimnazija", Kragujevac, Serbia

Professional Positions

2009-2010 Member of Scientific-Educational Council of Faculty of Science, University of Kragujevac
2006-present Main administrator of a grid cluster AEGIS04-KG, member of EGI (European Grid Initiative)

Memberships in Professional Organizations

Serbian Society of Computational Mechanics

Projects

2006-2010	(Serbian Ministry of Science, OI-144028) Methods of Modeling of the Biomechanical Systems with Medical Application
2005-2007	(Serbian Ministry of Science, TR-6209A) Development of Computational Methods and Software for Modeling in General and Biomedical Engineering
2004-2008	(Harvard University and University of Kragujevac, R01 HL070542-03) Particles in Developing Lung: Bioengineering Approach, NHLBI Prime Grant 5
2002-2004	(Serbian Ministry of Science, TR233) Development of Methods, Software and Equipment in Biomechanics and Bioengineering
2006-2008	(European FP6) SEEGRID-2 (South-East European Grid Initiative) - providing specific support actions to pave the way towards the participation of the SE European countries to the Pan-European and worldwide Grid initiatives
2008-2010	(European FP7) SEEGRID-SCI (South-East European Grid Initiative) - providing specific support actions to pave the way towards the participation of the SE European countries to the Pan-European and worldwide Grid initiatives

Research Interests

Software development, particle and mesh-free numerical methods, parallel and distributed computing, cloud computing.

Organizing Committee

SEECCM06, First Balkan Conference on Computational Mechanics, Kragujevac, 2006 (Member of Organizing Committee and Member of Coordination Committee)

Teaching Experience

Undergraduate level:

Operating Systems 1
Operating Systems 2
Computer Networks and Network Technologies
Parallel Computing
Software Tools 1
Software Tools (Mathematics section)
Facultative Seminar 2

Ph.D. level:

Internet technologies

Previously: Web programming, Client Web Technologies, Computer Architecture.

Publications

Book Chapters

M. Kojic, N. Filipović, B. Stojanović i N. Kojić. *Computer Modeling in Bioengineering*, John Wiley and Sons. 2008.

Refereed Journals

N. Filipovic, M. Ivanovic, M. Kojic, A comparative numerical study between dissipative particle dynamics (DPD) and smooth particle hydrodynamics (SPH) when applied to simple unsteady flows in microfluidics, *Microfluidics and Nanofluidics*, 2009, Volume 7, Number 2, 227-235, DOI: 10.1007/s10404-008-0379-0, ISSN 1613-4982

N. Kojic, H. Austin, C. Euiheon, M. Ivanovic, N. Filipovic, M. Kojic, D. Tschumperlin, A 3-D Model of Ligand Transport in a Deforming Extracellular Space, *BIOPHYSICAL JOURNAL*, 2010, Volume 99, Number 11, 3517-3525.

Lecca G, Petitdidier M, Hluchy L, Ivanovic Milos R, Kussul N, Ray N, Thieron V, Grid computing technology for hydrological applications, *JOURNAL OF HYDROLOGY*, 2011, Volume 403, Number 1-2, 186-199.

Filipovic Nenad D, Ivanovic Milos R, Krstajic Damjan, Kojic Milos R, Hemodynamic Flow Modeling Through an Abdominal Aorta Aneurysm Using Data Mining Tools, *IEEE TRANSACTIONS ON INFORMATION TECHNOLOGY IN BIOMEDICINE*, 2011, Volume 15, Number 2, 189-194.

Milenkovic Biljana, Stevanovic Nenad, Nikezic Dragoslav R, Ivanovic Milos R, Computer program Neutron_CR-39 for simulation of neutrons from an Am-Be source and calculation of proton track profiles, *COMPUTER PHYSICS COMMUNICATIONS*, 2011, Volume 182, Number 7, 1536-1542.

M. Kojić, N. Filipović, B. Stojanović, V. Ranković, M. Krstić, L. Otašević, M. Ivanović, M. Nedeljković, M. Dimkić, M. Tričković, M. Pušić, Đ. Boreli-Zdravković, D. Đurić Finite element modeling of underground water flow with Ranney wells, *Water Science & Technology: Water Supply*, 2007, Volume 7, Number 3, 41-50, DOI: 10.2166/ws.2007.065, ISSN: 1606-9749

Dimkic, M. Krstic, N. Filipovic, B. Stojanovic, V. Rankovic, L. Otasevic, M. Ivanovic, M. Nedeljkovic, M. Trickovic, M. Pusic, D. Boreli-Zdravkovic, D. Djuricic, M. Kojic, Comparison of Different Configurations of Ranney Wells Using Finite Element Modeling. *Journal of the Serbian Society for Computational Mechanics*, *Journal of the Serbian Society for Computational Mechanics*, 2007; Volume 1, Number 1, 144-153, ISSN: 1820-6530

Conference Proceedings

M. Kojic, N. Filipovic, J. Buttler, I. Vlastelica, M. Ivanovic, B. Stojanovic, V. Rankovic, A. Tsuda, Airflow irreversibility within the pulmonary acinus due to hysteresis of surfactant and tissue, *FASEB JOURNAL*, 2005, abstract, Volume 19, Number 4, A642-A642, ISSN: 0892-6638

L. Otasevic, N. Filipovic, M. Ivanovic, Sparse Matrices Using Balanced Binary Trees and Parallel Computing, *First South-East European Conference on Computational Mechanics Proceedings*, 2006, Kragujevac, Serbia, 120-125, ISBN: 86-81037-13-7

M. Krstić, M. Kojić, N. Filipović, B. Stojanović, V. Ranković, L. Otašević, M. Ivanović, M. Nedeljković, M. Dimkić, M. Tričković, M. Pušić, Đ. Boreli-Zdravković, D. Đurić, Finite Element Modeling of Underground Water Flow With Ranney Wells, *First South-East European Conference*

on Computational Mechanics Proceedings, 2006, Kragujevac, Serbia, 510-516, ISBN: 86-81037-13-7

M. Kojić, N. Filipović, B. Stojanović, V. Ranković, M. Krstić, L. Otašević, M. Ivanović, M. Nedeljković, M. Dimkić, M. Tričković, M. Pušić, Đ. Boreli-Zdravković, D. Đurić, Finite element modeling of underground water flow with Ranney wells, Regional IWA Conference on Groundwater Management in the Danube River Basin and Other Large River Basins Proceedings, 2007, Belgrade, Serbia, 427-433, ISBN: 978-86-82565-17-8

M. Ivanovic, M. Kojic, L. Otašević, On use of the Newmark implicit scheme and MD-based material model in multiscale modeling, First South-East European Conference on Computational Mechanics Proceedings, 2006, Kragujevac, Serbia, 95-100, ISBN: 86-81037-13-7

Krstić Miroljub, Miloš Ivanović, Lazar Otašević, Nenad Filipović, Application of grid infrastructure in biomedicine simulations, Proceedings of the 1st International Congress of Serbian Society of Mechanics, 2007, Kopaonik, Serbia, 891-896, ISBN: 978-86-909973-0-5

M. Ivanovic, N. Filipovic, M. Kojic, A. Tsuda, Numerical modeling of particle deposition in human lung, Proceedings of the 1st International Congress of Serbian Society of Mechanics, 2007, Kopaonik, Serbia, 879-884, ISBN: 978-86-909973-0-5