



УНИВЕРЗИТЕТ У БЕОГРАДУ
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ПРЕДЛОГ ОДЛУКЕ
(о ангажовању гостујућег професора за школску 2009/2010. годину)

Предлаже се ангажовање проф. др Зорана Обрадовића, међународно истакнутог научника у области Откривања законитости у подацима, као гостујућег професора за извођење наставе из научне области Моделирање пословних система и пословно одлучивање на студијским програмима на основним, дипломским академским - Мастер и докторским студијама Факултета организационих наука за школску 2009/2010. годину.

Предлог одлуке упућује се Сенату Универзитета на сагласност.

ПРЕДСЕДНИК НАСТАВНО-НАУЧНОГ ВЕЋА

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Доставити:

- Сенату Универзитета,
- Катедри за организацију пословних система,
- Секретару,
- Реф. органа управљања,
- Стр. сараднику за људске ресурсе,
- Архиви.

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РАДОВИ У МЕЂУНАРОДНИМ ЧАСОПИСИМА		74 (у водећим међународним часописима)
РАДОВИ САОПШТЕНИ НА МЕЂУН. СКУПОВИМА		105
РЕЗУЛТАТИ У РАЗВОЈУ ОБРАЗОВНО-НАУЧНЕ ОБЛАСТИ		Предавао 11 различитих курсева кроз године од 1991. Ментор је био укупно 7 постдоктораната, 25 доктораната (12 тренутно), и више студената мастер студија Тренунто је директор Центра за информационе науке и технологију, на Temple универзитету Учесник многих образовно-научних одбора на Temple Универзитету и Washington State Универзитету (детаљније у приложеној биографији)
ЦИТИРАНОСТ НАУЧНИХ РЕЗУЛТАТА		2954, укупан број цитата у часописима (на основу Web of Science и не укључујући цитираност конференцијских радова) h-index 33 (33 рада цитирано више од 33 пута)
МЕЂУНАРОДНА РЕПУТАЦИЈА	ГОСТ УРЕДНИК МЕЂУНАРОДНОГ ЧАСОПИСА	5 угледних међународних часописа (видети биографију за детаље)
	ПРЕДСЕДАВАО МЕЂУНАРОДНИМ НАУЧНИМ КОНФЕРЕНЦИЈАМА	13 председавања, 36 чланства у програмским одборима
	ЧЛАНСТВО У УРЕЂИВАЧКИМ ОДБОРИМА МЕЂУНАРОДНИХ НАУЧНИХ ЧАСОПИСА	10
	АУТОР МЕЂУНАРОДНЕ МОНОГРАФИЈЕ	12 радова публикованих као поглавља монографија (са рецензијом)
НАПОМЕНА		

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1. Veći broj naučnih radova objavljenih u vodećim međunarodnim časopisima

Bioinformatics Journal Articles:

1. Garriga, J., Xie, H., Obradovic, Z., Grana, X. (in press) "Selective Control of Gene Expression by CDK9 in Human Cells," *Journal of Cellular Physiology*.
2. Uversky, V.N., Oldfield, C.J., Midic, U., Xie, H., Xue, B., Vucetic, S., Iakoucheva, L.M., Obradovic, Z., Dunker, A.K., (2009) "Unfoldomics of Human Diseases: Linking Protein Intrinsic Disorder with Diseases," *BMC Genomics*, vol. 10 Suppl 1:S07.
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7. Xu, Q., Canutescu, A., Wang, G., Shapavalov, M.V., Obradovic, Z. and Dunbrack, R.L. (2008) "Statistical Analysis of Interfaces in Crystals of Homologous Proteins," *J. Molecular Biology*, vol. 381, pp. 487-507.
8. Ren, S., Uversky, V.N., Chen, Z., Dunker, A.K. and Obradovic, Z. (2008) "Short Linear Motifs recognized by SH2, SH3 and Ser/Thr Kinase domains are conserved in disordered protein regions," *BMC Genomics*, vol. 9 (Suppl 2):S26, 9. Sept.
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11. Vucetic, S., Xie, H., Iakoucheva L.M., Oldfield C.J., Dunker, A.K., Obradovic, Z. and Uversky, V.N. (2007) "Functional Anthology of Intrinsic Disorder. II. Cellular Components, Domains, Technical Terms, Developmental Processes," *Journal of Proteome Research*, May 4;6(5):1899-1916.
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16. Xu, Q., Canutescu, A., Obradovic, Z. and Dunbrack, R.L. (2006) "ProtBuD: A Database of Biological Unit Structures of Protein Families and Superfamilies," *Bioinformatics*, Dec 1;22(23):2876-82.
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26. Radivojac, P., Chawla, N. V., Dunker, A.K., and Obradovic, Z. (2004) "Classification and Knowledge Discovery in Protein Databases," *Journal of Biomedical Informatics*, vol. 37, pp. 224-239.
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39. Romero, P., Obradovic, Z. and Dunker, A.K. (1999) "Folding Minimal Sequences: The Lower Bound for Sequence Complexity of Globular Proteins," *FEBS Letters*, vol. 462, pp.363-367.
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Spatial and Spatio-Temporal Data Mining Journal Articles:

41. Radosavljevic, V., Vucetic, S., Obradovic, Z. (in review) "A Data Mining technique for Aerosol Retrieval across Multiple Accuracy Measures."
42. Vucetic, S., Han, B., Mi, W., Li, Z., Obradovic, Z. (2008) "A Data Mining Approach for the Validation of Aerosol Retrievals," *IEEE Geoscience and Remote Sensing Letters*, vol. 5, no. 1, pp. 113-117.
43. Han, B., Vucetic, S., Braverman, A. and Obradovic, Z. (2006) "A Statistical Complement to Deterministic Algorithms for Retrieving Aerosol Optical Thickness from Radiance Data," *Engineering Applications of Artificial Intelligence*, vol. 19, no. 7, pp. 787-795.

44. Pokrajac, D., Obradovic, Z. (accepted with minor revisions) "Spatial-Temporal Prediction with Partial Attribute Observability," *Computers and Geoscience*.
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47. Lazarevic, A. and Obradovic, Z. (2001) "Adaptive Boosting Techniques in Heterogeneous and Spatial Databases," *Intelligent Data Analysis*, Vol. 5, pp.1-24.
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Predictive Data Mining Methods Journal Articles

49. Jones, P.R., Schwartz, D., Schwartz, I.M., Obradovic, Z., Jupin, J., (2007) "Risk Classification and Juvenile Dispositions: What is the State of the Art?" *Temple Law Review*, vol. 79, no. 2., pp. 461-498.
50. Vucetic, S. and Obradovic, Z. (2005) "Collaborative Filtering Using a Regression-Based Approach," *Knowledge and Information Systems*, Vol. 7, No. 1, pp. 1-22.
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Parallel and Distributed Data Mining Journal Articles:

52. Lazarevic, A. and Obradovic, Z. (2002) "Knowledge Discovery in Multiple Spatial Databases," *Neural Computing and Applications*, vol 10. no. 4, pp. 339-350.
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55. Perez, L.G., Flechsig, A.J., Meador, J.L. and Obradovic, Z., (1994) "Training an Artificial Neural Network to Discriminate Between Magnetizing Inrush and Internal Faults," *IEEE Trans. on Power Delivery*, vol. 9, no. 1., pp. 434-441.

Time Series Analysis Journal Articles:

56. Vucetic, S., Obradovic, Z. and Tomsovic, K. (2001) "Price-Load Relationships in California's Electricity Market," *IEEE Trans. on Power Systems*, Vol. 16, No. 2, pp. 280-286.
57. Obradovic, Z. and Chenoweth, T., (1996) "Selection of Learning Algorithms for Trading Systems Based on Biased Estimators." *Heuristics, The Journal of Intelligent Technologies*, vol. 9, no. 1, pp. 9-21.
58. Chenoweth, T., Obradovic, Z. and Lee, S., (1996) "Embedding Technical Analysis into Neural Network Based Trading Systems," *Applied Artificial Intelligence*, Taylor & Francis, Washington D.C., vol. 10, no. 6., pp. 523-541.
59. Drossu, R. and Obradovic, Z., (1996) "Regime Signaling Techniques for Nonstationary Time Series Forecasting," *Journal of Computational Intelligence in Finance*, Finance & Technology Publishing, vol. 4, no. 5, pp. 7-15.
60. Drossu, R. and Obradovic, Z., (1996) "Rapid Design of Neural Networks for Time Series Prediction," *IEEE Computational Science and Engineering*, vol. 3, no. 2, pp. 78-89.
61. Chenoweth, T. and Obradovic, Z., (1996) "A Multi-Component Nonlinear Prediction System for the S&P 500 Index," *Neurocomputing*, vol. 10, no. 3, pp. 275-290.
62. Chenoweth, T. and Obradovic, Z., (1995) "An Explicit Feature Selection Strategy for Predictive Models of the S&P 500 Index," *Journal of Computational Intelligence in Finance*, Finance & Technology Publishing, vol. 3, no. 6, pp. 14-21.

Hybrid Knowledge Systems Journal Articles

63. Obradovic, Z. and Srikumar, R. (2001) "Parallelizing Design of Application Tailored Neural Networks," *Facta Universitatis, Ser. Mathematics and Informatics*, vol. 16, pp. 97-108.
64. Obradovic, Z. and Srikumar, R. (2000) "Constructive Neural Networks Design Using Genetic Optimization," *Facta Universitatis, Ser. Mathematics and Informatics*, vol. 15, pp. 133-146
65. Obradovic, Z. (1997) "Guest Editorial: Hybrid Intelligence for Financial Forecasting," *NeuroVest Journal*, vol. 5, no. 1, pp. 4-5.
66. Drossu, R., Obradovic, Z. and Fletcher, J. (1996) "A Flexible Graphical User Interface for Embedding Heterogeneous Neural Network Simulators," *IEEE Trans. on Education, special issue on Applications of Information Technology*, volume 39, no. 3, pp. 367-374.
67. Fletcher, J. and Obradovic, Z., (1995) "A Discrete Approach to Constructive Neural Network Learning," *Neural, Parallel and Scientific Computations*, vol. 3, no. 3, pp. 307-320.
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Neural Networks Journal Articles:

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72. Obradovic, Z. and Parberry, I. (1994) "Learning with Discrete Multi-Valued Neurons," *Journal of Computer and System Sciences*, vol. 49, no. 2, pp. 375-390.

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74. Obradovic, Z. and Yan, P., (1990) "Small Depth Polynomial Size Neural Networks," *Neural Computation*, vol. 2, no. 4, pp. 402-404.

2. Veći broj naučnih radova saopštenih na međunarodnim skupovima

Biomedical Informatics Fully Refereed Conference Articles

1. Li, A., Obradovic, Z., Smith, D.J., Bodenreider, O., Megalooikonomou, V. (in press) „Mining Association Rules among Gene Functions in Clusters of Similar Gene Expression Maps,” *Workshop on Data Mining in Functional Genomics at the IEEE International Conference on Bioinformatics and Biomedicine, Washington D.C., November 2009*.
2. Midic U, Dunker A.K., and Obradovic, Z. (2009) "Protein Sequence Alignment and Intrinsic Disorder: A Substitution Matrix for an Extended Alphabet," *Proc. Workshop on Statistical and Relational Learning and Mining in Bioinformatics at the 15th ACM SIGKDD Conf. Knowledge Discovery and Data Mining*, Paris, France, June 2009.
3. Jianjiong Gao, Ganesh Kumar Agrawal, Jay J. Thelen, Zoran Obradovic, A. Keith Dunker, and Dong Xu. A New Machine Learning Approach for Protein Phosphorylation Site Prediction in Plants. *Lecture Notes in Bioinformatics (LNBI 5462): Proceeding of the First International Conference on Bioinformatics and Computational Biology (BICoB)*, April 2009, New Orleans, USA, pp. 18-29.
4. Ren, S. and Obradovic, Z. (2008) "Improvement of Survival Prediction from Gene Expression Profiles by Mining of Prior Knowledge," *Proc. IEEE Int'l Conf. on Bioinformatics and Biomedicine*, Philadelphia, Nov. 2008.
5. An L., Xie H., Chin M., Obradovic Z., Smith D., Megalooikonomou V., (2008) "Analysis of Multiplex Gene Expression Maps Obtained by Voxelation" *Proc. IEEE Int'l Conf. on Bioinformatics and Biomedicine*, Philadelphia, Nov. 2008.
6. Dunker, K., Oldfield, C.J., Meng, J. Romero, P., Yang, J., Obradovic, Z. and Uversky, V.N. (2007) "Intrinsically Disordered Proteins: An Update," *Proc. IEEE 7th Int'l Symp. Bioinformatics and Bioengineering*, Harvard Medical School, Cambridge, MA, pp. 49-58.
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Hybrid Knowledge Systems: Fully Refereed Conference Articles

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3. Ostvareni rezultati u razvoju odgovarajuće obrazovno-naučne oblasti

Temple University Service:

- President's Tenure and Promotion Advisory Committee member (2004 – 2005).
- CST Dean Search Committee member (2004-2005).
- CST College Promotion and Tenure Committee member (2003-2010).
- CST Merit Committee member (2001, 2003, 2006, 2007, 2008).
- CIS Chair of Faculty Search Committee (2001, 2002, 2007, 2008).
- CIS Chair of Promotion and Tenure Committee (2006, 2008, 2009)
- CIS Promotion and Tenure Committee member (2004).
- CIS Advisor to Faculty Search Committee (2003).
- CIS Chair of Research Committee (2005 – 2007).
- CIS Research Committee member (2000-2005).
- CIS Graduate Studies Committee member (2000-present).

Washington State University Service:

- EECS Graduate Program Coordinator for Computer Science (1997-2000).
- EECS Undergraduate Program Coordinator for Computer Science (1992-1994).
- EECS Personnel and Policy Committee elected member (1997-present).
- EECS Task Force on Graduate Studies Policies member (1996-present).
- CS Faculty Search committee chair (1999).
- EECS Director Search committee member (1999).
- CS Promotion and Tenure Committee chair (1999).
- CS Third Year Evaluation Committee member (1999).
- CS Faculty Search Committee member (1997).
- 20 PhD and more than 30 M.S. thesis committees member (1991-present).
- Interdisciplinary graduate students advising and committee service in Economics, Management and Systems, Biochemistry, Chemistry, Crop and Soil Sciences, Psychology, Education, Electrical Engineering and Computer Science (1991-present).
- CS colloquium coordination (1991-1996).
- CS Graduate Students Admission committee member (1994-1996).
- Software Engineering technical committee member (1994-1996).
- Computer Engineering Curriculum Development committee member (1991-1994).
- Software Engineering Curriculum Development committee member (1991-1993).
- Algorithmics Curriculum Development committee member (1991-1994).
- Artificial Intelligence Curriculum Development committee member (1991-1994).
- Undergraduate Studies committee member (1991-1994).
- Boeing Chairman Professorship Faculty Search committee member (1991).

TEACHING:

Consistently receiving excellent student evaluations (significantly better than for department, college and university at all criteria)

- Machine Learning (graduate course, taught in 2005, 2006)
- Knowledge Discovery and Data Mining (graduate course, taught in 1998, 2003, 2004, 2008).

- Data Warehousing, Filtering and Data Mining (graduate course, taught in 2001).
- Neural Computation (graduate course, developed and taught in 1992, 1993, 1994, 1996 and 1999, 2001, 2006).
- Parallel Computation (new graduate course, developed and taught in 1992, 1993 and 1996).
- Artificial Intelligence (graduate course, taught in 1992 and 1993).
- Algorithmics (graduate course, developed and taught in 1995, 1996, 1997, 1998).
- Design and Analysis of Algorithms (undergraduate course, taught in 1994).
- Automata and Formal Languages (undergraduate course, taught in 1994 and 1997).
- Introduction to Artificial Intelligence (undergraduate course, taught in 1991 and 1995).
- Neural Network Design and Application (new undergraduate course, developed and taught in 1997).

STUDENTS ADVISING:

Postdoctoral Associates and Visiting Scholars:

- Xiaohong Li (1999-2001)
- Slobodan Vucetic (2001-2002)
- Junping Wang (1999-2001)
- Lining Yu (2006-present)
- Vadim Ayuyev (2007-2008)
- Zhongmei Shu (2008- 2009)
- Dairong Wang (2009-present)

Current Ph.D. Students:

- Debashis Das
- Research: *Spatial and Temporal Data Mining*.
- Mohamed Ghalwash
- Research: *Bioinformatics*
- Solomon Jones
- Research: *Social Science Data Mining*
- Joseph Jupin
- Research: *Spatial Data Mining in Social Science*
- Qiang Lou
- Research: *Spatial and Temporal Data Mining*.
- Uros Midic
- Research: *Bioinformatics*
- Zhang Ping
-Research: *Bioinformatics*.
- Yilian Qin
- Research: *Spatial and Temporal Data Mining*.
- Vladimir Ouzienko
-Research: *Analysis of Social Science Data*.
- Vladan Radosavljevic
- Research: *Spatial and Temporal Data Mining*.
- Kosta Ristovski
- Research: *Spatial and Temporal Data Mining*.
- Jinting Zeng
-Research: *Bioinformatics*.

Graduated Ph.D. Students:

- Qifang Xu
- Dissertation: "Statistical Analysis of Biological Interactions of Homologous Proteins," Computer and Information Science Ph.D., Temple University, Fall 2008.
- First Ph.D. position: Research Associate, Fox Chase Cancer Institute, Philadelphia
- Michael Hongbo Xie
- Dissertation: "*Functional Characterization of Large Scale Biological Data*," Computer and Information Science Ph.D., Temple University, Summer 2007.
- First Ph.D. position: Bioinformatics Specialist, IDF Research Department of Children's Hospital of Philadelphia
- Bo Han
- Dissertation: "*Knowledge Discovery by Fusion of Information*," Computer and Information Science Ph.D., Temple University, Summer 2007.
- First Ph.D. position:
- Kang Peng
- Dissertation: "*Learning from Protein Structure Related Data*," Computer and Information Science Ph.D., Temple University, Spring 2006.
First Ph.D. position: Research Associate, School of Informatics, Indiana University, Bloomington.
- Predrag Radivojac

- Dissertation: "*Classification and Knowledge Discovery in Protein Databases*," Computer and Information Science Ph.D., Temple University, Fall 2003.
- First Ph.D. position: Research Associate, School of Medicine, Indiana University, Indianapolis.
- Dragoljub Pokrajac
 - Dissertation: "*Knowledge Discovery in Spatial-Temporal Databases*," Computer and Information Science Ph.D., Temple University, Summer 2002.
 - First Ph.D. position: Assistant Professor, Computer Science Dept., Delaware State University.
- Aleksandar Lazarevic
 - Dissertation: "*Distributed Inductive Learning for Time/Space Data Analysis*," Computer and Information Science Ph.D., Temple University, Fall 2001.
 - First Ph.D. position: Research Associate, Army High Performance Computing Research Center, Computer Science Dept., University of Minnesota.
- Slobodan Vucetic
 - Dissertation: "*On-line Systems for Non-stationary Data Analysis and Modeling*," Electrical Engineering Ph.D., WSU, Summer 2001.
 - First Ph.D. position: Visiting Assistant Professor, Center for Information Sciences and technology and Computer and Information Sciences Department, Temple University, Philadelphia, PA.
- Pedro Romero
 - Dissertation: "*Knowledge Discovery and Data Mining in Protein Databases*," Computer Science Ph.D., WSU, Spring 1999.
 - First Ph.D. position: Research Scientist, Artificial Intelligence Laboratories, *Stanford Research Institute International*, Menlo Park, CA.
- Radu Drossu
 - Dissertation: "*Efficient Design of Neural Networks for Time Series Prediction*," Computer Science Ph.D., WSU, Summer 1997.
 - First Ph.D. position: Staff Scientist, Financial Engineering Group, *HNC Software Inc.*, San Diego, CA.
- Tim Chenoweth
 - Dissertation: "*A Neural Network Based System for Predicting Future Returns for the S&P 500 Stock Index*," Interdisciplinary Ph.D., WSU, Summer 1996.
 - First Ph.D. position: Assistant Professor (tenure track), School of Accountancy, *Arizona State University*.
- Srdjan Milenkovic
 - Dissertation: "*Higher-Order Dynamic Learning Through Nondeterministic Global Optimization*," Electrical Eng. Ph.D., University of Nis, Yugoslavia, co-advised with Prof. Vanco Litovski from Univ. of Nis, Summer 1996.
 - First Ph.D. position: Research Scientist, Microelectronics Centre, *Middlesex University*, London, United Kingdom.
- Justin Fletcher
 - Dissertation: "*A Constructive Approach to Hybrid Architectures for Machine Learning*," Computer Science Ph.D., WSU, Summer 1994.
 - First Ph.D. position: Principal Engineer, *Itron Corp.*, Spokane, WA.

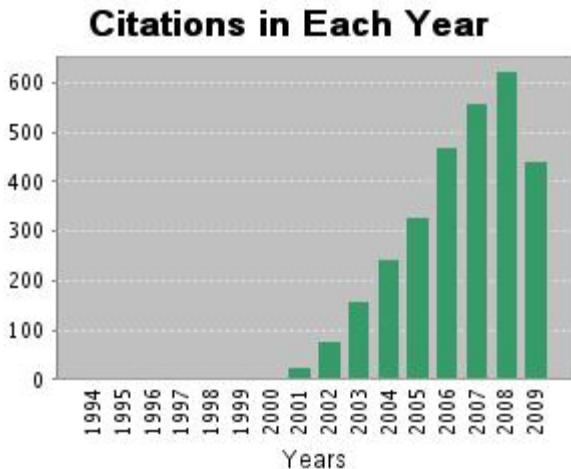
Graduated M.S. Students:

- Stephen Muchmore
 - Thesis: "*Combining Point Level and Aggregated Tract Level Data to Improve Clustering of Adolescent Crime Data in Philadelphia*," Computer Science, M.S., Fall 2007.
- Yilian Qin
 - Thesis: "*Support Vector Machine Reuse for Large Spatio-Temporal Datasets*," Computer Science M.S., Spring 2005.
 - Continued towards a computer science Ph.D. at Temple University
- Tim Chenoweth
 - Project: "*Learning Algorithms for Trading Systems Based on Biased Estimators*," Computer Science M.S., Spring 1996.
 - Continued towards an Interdisciplinary Ph.D. at WSU.
- Srikumar Rangarajan
 - Thesis: "*Design of Application-Tailored Neural Networks Using Genetic Algorithms*," Computer Science M.S., Summer 1993.
 - First M.S. job at the Microsoft Inc., Redmond, WA.
- Anthony Kampka
 - Thesis: "*A Stochastic Technique in Constructive Training of Artificial Neural Networks*," Computer Science M.S. Fall 1992.
 - First M.S. job at the Exabyte Corp., Boulder, CO.
- Shailesh Vaishnavi
 - Project: "*Storage Organization for Multiattribute Retrieval in CAD Databases*," Computer Science M.S., Summer 1992.
 - First M.S. job at the Amdahl Corp., Sunnyvale, CA.

4. Citiranost naučnih rezultata

h indeks 33 (33 rada citarana vise od 33 puta)

ukupan broj citata radova u casopisima 2,954 (na osnovu Web of Science i ne ukljucujuci citiranost konferencijskih radova)



5. Međunarodna naučna reputacija

5.1 Gost-urednik u uglednim međunarodnim naučnim časopisima

Guest Editor:

- Statistical Analysis and Data Mining, The Best of SDM 2009 Issue (co-edited with H. Liu)
- *BMC Bioinformatics*, Special Issue on First International Workshop on Text Mining in Bioinformatics (co-edited with M. Song), vol. 8, supp. 9, 2007.
- *Knowledge and Information Systems*, Special Issue on Selected and Revised Papers from KDD-2000 Workshop on Distributed and Parallel Knowledge Discovery, vol. 3, no. 4, 2001. (co-edited with J. Ghosh, H. Kargupta and V. Kumar)
- *Journal of Computational Intelligence in Finance*, Special Issue on Financial News Analysis using Distributed Data Mining, vol. 7, no. 2, March 1999, (co-edited with S.H. Rubin).
- *Journal of Computational Intelligence in Finance*, Special Issue on Hybrid Neural Networks for Financial Forecasting, vol. 5, no. 1, January 1997.

5.2 Predsedavao međunarodnim naučnim konferencijama

Program Chair:

- *Ninth SIAM International Conference on Data Mining*, Atlanta, Reno, April, 2009 (**Program Co-Chair with H. Liu**).
- *IEEE 2007 International Conference on Bioinformatics and Biomedicine*, San Jose, CA, Nov. 2007 (**Program Co-Chair with X.T. Hu and I. Mandoiu; and Steering committee member**).
- *The 39th Symposium on the Interface of Statistics, Computing Science and Applications*, Philadelphia, PA, May 2007 (**Co-Chair with A. Izenman**).
- *ACM First International Workshop on Text Mining in Bioinformatics*, Arlington, MD, Nov. 2006 (**Co-Chair with M. Song**).
- Distributed and Parallel Knowledge Discovery Workshop, The Sixth ACM SIGKDD Int'l. Conf. on Knowledge Discovery and Data Mining, Boston, August, 2000 (**Co-chair**).

Track Chair:

- *Tenth SIAM International Conference on Data Mining*, Columbus, Ohio, April 2010 (**Senior Program Committee Member**).
- *Eight SIAM International Conference on Data Mining*, Atlanta, Georgia, April, 2008 (**Applications Track Chair**).
- *The 2007 International Conference on Artificial Intelligence*, Las Vegas, NV, June 2007 (**Program Vice Chair**).
- *The 2007 International Conference on Bioinformatics and Computational Biology*, Las Vegas, NV, June 2007 (**Program Vice Chair**).
- *The 2007 International Conference on Genetic and Evolutionary Methods*, Las Vegas, NV, June 2007 (**Program Vice Chair**).
- *The 2007 International Conference on Scientific Computing*, Las Vegas, NV, June 2007 (**Program Vice Chair**).
- *IEEE 21st International Conference on Advanced Information Networking and Applications*, Niagara Falls, Canada, May 2007 (**Program Vice Chair for Distributed Database and Data Mining**).
- *Sixth SIAM International Conference on Data Mining*, Bethesda, MD, April 2006 (**Bio-Medical Informatics Track Chair**).

Steering Committee Member:

- *IEEE 2009 International Conference on Bioinformatics and Biomedicine*, Washington, D.C., November, 2009.
- *2010 Conference on Intelligent Data Understanding*, NASA Ames Research Center.

Program Committee Member:

- *The 8th International Conference on Machine Learning and Application (ICMLA 2009)*, Miami, Florida, USA, December, 2009.
- *First ICDM Workshop on Knowledge Discovery from Climate Data: Prediction, Extremes, and Impact*, held in conjunction with the *IEEE International Conference on Data Mining (IEEE ICDM)*, Miami, Florida, USA, December, 2009.
- *The 15th ACM SIGKDD Conference on Knowledge Discovery and Data Mining*, Paris, France, June 2009.
- *The 7th International Conference on Machine Learning and Application (ICMLA 2008)* San Diego, California, Dec., 2008.
- *The 2008 IEEE International Conference on Bioinformatics and Biomedicine*, Philadelphia, PA, Nov 7-9, 2008.
- *The 2008 ACM Second International Workshop on Data and Text Mining in Bioinformatics, in conjunction with CIKM 2008*, Napa Valley, California, Oct., 2008.
- *12th Pacific-Asia Conference on Knowledge Discovery and Data Mining*, Osaka, Japan, May, 2008.
- *Data Mining in Medicine Workshop, in conjunction with the IEEE International Conference on Data Mining*, Omaha, Nebraska, October, 2007.
- *2nd IAPR Workshop on Pattern Recognition in Bioinformatics*, Singapore, October, 2007.
- *11th Pacific-Asia Conference on Knowledge Discovery and Data Mining*, Nanjing, China, May, 2007.
- *2nd BioDM Workshop on Data Mining for Biomedical Applications*, Nanjing, China, May, 2007.
- *Seventh SIAM International Conference on Data Mining*, Minneapolis, Minnesota, April, 2007.
- *2007 IEEE Symposium Series on Computational Intelligence, Data Mining Symposium*, Honolulu, Hawaii, April 2007.
- *6th International Workshop on Data Mining in Bioinformatics, 12th ACM SIGKDD Int'l Conf. on Knowledge Discovery and Data Mining*, Philadelphia, Aug. 2006.
- *2006 IAPR Workshop Pattern Recognition in Bioinformatics*, Hong Kong, Aug. 2006.
- *IEEE International Conference on Mechatronics and Automation*, Luoyang, Henan, China, June 2006.
- *The 38th Symposium on the Interface of Statistics, Computing Science and Applications*, Pasadena, CA, May 2006.
- *9th Workshop on Mining Scientific Datasets*, Bethesda, Maryland, April 2006.
- *5th IEEE Symposium on Bioinformatics and Bioengineering*, Minneapolis, Minnesota, Oct. 2005.
- *IEEE Region 8 EUROCON Int'l Conf. on Computer as a Tool*, Belgrade, Serbia, Nov. 2005.
- *4th Int'l Conf. Computational Intelligence in Economics and Finance*, special session on Forecasting Volatility in Financial Market, Salt Lake City, Utah, July 2005.
- *2005 IEEE Int'l Conf. Mechatronics and Automation*, Niagara Falls, Canada, July 2005.
- *Fifth SIAM International Conference on Data Mining*, Newport Beach, CA, April 2005.
- *Emerging Information Technology Conference*, Princeton University, Oct. 2004.
- *Fourth SIAM International Conference on Data Mining*, Orlando, FL, April 2004.
- *Bioinformatics Workshop at the Fourth SIAM International Conference on Data Mining*, Orlando, FL, April 2004.
- *3rd Workshop on Bioinformatics in Data Mining (BIOKDD 2003)*, ACM SIGKDD International Conference on Knowledge Discovery and Data Mining, Washington, DC, August 2003.
- *Third SIAM International Conference on Data Mining*, San Francisco, CA, May 2003.
- *Sixth Workshop on Mining Scientific Dataset*, San Francisco, CA, May 2003.
- *Second Workshop on Data Mining in Bioinformatics, The Eight ACM SIGKDD Int'l Conf. on Knowledge Discovery and Data Mining*, Edmonton, Alberta, Canada, July 2002.
- *Int'l Conf. on Neural Networks Applications in Electrical Engineering*, Belgrade, Serbia, September 2002.
- *Soft Computing in Financial Markets Conference, Int'l Congress on Computational Intelligence Methods and Applications*, Rochester Institute of Technology, N.Y., June 1999.
- *Distributed and Parallel Data Mining Workshop, Knowledge Discovery in Databases Conference*, New York City, N.Y., August 1998.
- *4th Int'l Conf. Neural Networks Applications in Electrical Engineering*, Belgrade, Serbia, September 1997.

5.3 Članstvo u uređivačkom odboru međunarodnih naučnih časopisa

Journal Editorial Board Member:

- *International Journal of Computational Intelligence in Bioinformatics and Systems Biology*, 2009 -Present
- *International Journal of Computational Models and Algorithms in Medicine*, 2009 – Present.
- *Journal of Biomedicine and Biotechnology*, 2008 – Present.
- *Advances in Bioinformatics*, 2008 – Present
- *Statistical Analysis and Data Mining*, 2006 – 2009
- *International Journal of Parallel, Emergent and Distributed Systems*, 2006 - Present
- *International Journal of Data Mining and Bioinformatics*, 2005 – Present.
- *Multiple Valued Logic and Soft Computing*, 1995 - Present.
- *IEEE Trans. on Education*, 1997- 2001.

- Journal of Computational Intelligence in Finance, 1995 - 1999.

5.4 Autor međunarodne naučne monografije

Naučni radovi publikovani kao poglavlja u knjigama (sa recenzijom):

Biomedical Informatics: Peer Reviewed Book Chapters:

1. Xie, H., Obradovic, Z. and Vucetic, S. (2009) "Mining of Microarray, Proteomics, and Clinical Data for Improved Identification of Chronic Fatigue Syndrome," chapter 9 in McConnell, P, Lim, S., and A.J. Cuticchia, *Methods of Micorarray Data Analysis VI.* (Scotts Valley, California: CreateSpace Publishing, 2009), pp. 119-127.
2. Xie, H., Midic, U., Vucetic, S. and Obradovic, Z. (2008) "Algorithmic Methods for the A nalysis of Gene Expression Data," chapter 4 in *Handbook of Applied Algorithms: Solving Scientific, Engineering, and Practical Problems* (eds. A. Nayak and I. Stojmenovic), Willey-IEEE Press, pp. 115-146.
3. Uversky V.N., Radivojac, P., Iakoucheva, L.M., Obradovic, Z. and Dunker, A.K. (2007) "Prediction of Intrinsic Disorder and its Use in Functional Proteomics," chapter 5 in *Methods in Molecular Biology vol. 408: Gene Function Analysis* (ed. M. Ochs), Humana Press Inc., Totowa, N.J..
4. Peng, K. Obradovic, Z. and Vucetic, S. (2006) "Supervised Learning under Sample Selection Bias from Protein Structure Databases," in *Advances in Applied and Computational Mathematics*, Nova Science Publishers, pp. 153-170.

Spatial and Spatio-Temporal Data Mining: Peer Reviewed Book Chapters:

5. Han, B., Obradovic, Z. and Vucetic, S. (2008) "Using Statistical Methods to Improve Efficiency and Accuracy of Aerosol Retrievals," Chapter 7 in *Discrete and Computational Mathematics*, Nova Science Publishers, Editors: F. Liu, Gaston M. N'Guerekata, D. Pokrajac, X. Shi, J. Sun, X. Xia, pp. 93-106.

Predictive Data Mining Methods: Peer Reviewed Book Chapters:

6. Schwartz, I.M., Jones, P.R., Schwartz, D., Obradovic, Z. (2008) "Improving Social Work Through the Use of Technology and Advanced Research Methods," chapter 13 in *Child Welfare Research: Advances for Practice and Policy* (eds. Lindsey, D. and Shlonsky, A.) Oxford, pp. 214-230.
7. Obradovic, Z. and Vucetic, S. (2004) "Challenges in Scientific Data Mining: Heterogeneous, Biased, and Large Sample," a peer reviewed book chapter at *The Next Generation Data Mining* (editors: H. Kargupta, A. Joshi, K. Sivakumar, Y. Yesha), AAAI/MIT Press, pp. 381-401

Time Series Analysis: Peer Reviewed Book Chapters

8. Drossu, R. and Obradovic, Z. (2000) "Data Mining Techniques for Designing Efficient Neural Network Time Series Predictors," peer reviewed book chapter no. 10 in Cloete, I. and Zurada, J. *Knowledge-Based Neurocomputing*, MIT Press, ISBN 0-262-03274-0, pp. 325-368.
9. Drossu, R. and Obradovic, Z. (1997) "An Analysis of the INFFC Cotton Futures Time Series: Lower Bounds and Testbed Design Recommendations," in Caldwell, B. R., (editor) *Nonlinear Financial Forecasting: The First Nonlinear Financial Forecasting Competition, Finance & Technology Publishing*, pp. 241-261.
10. Drossu, R. and Obradovic, Z. (1996) "Prediction Horizon Effects on Stochastic Modeling Hints for Neural Networks," In P.E. Keller, S.Hashem, L.J. Kangas, and R. T. Kouzes (editors) *Applications of Neural Networks in Environment, Energy, and Health*
11. Drossu, R., Lakshman, T.V., Obradovic, Z. and Raghavendra C.S., (1995) "Single and Multiple Frame Video Traffic Prediction Using Neural Network Models," In Raghavan S.V. and Jain B.N. (editors) *Computer Networks, Architecture and Applications*, Chapman & Hall, 1995, chapter 9, pp. 146-158.

Hybrid Knowledge Systems: Peer Reviewed Book Chapters

12. Romero, P., Obradovic, Z. and Fletcher J. (2000) "Integration of Heterogeneous Sources of Partial Domain Knowledge," peer reviewed book chapter no. 7 in Cloete, I. and Zurada, J. *Knowledge-Based Neurocomputing*, MIT Press, pp. 217-250.