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OBJECTIVE **Associate professor position.** Teaching and research in data-mining, bioinformatics, machine learning, database systems, video-analysis, statistical and pattern recognition systems for classification, inferences and decision support.

EDUCATION

Ph.D. in Computer Science, Temple University, Philadelphia, PA, USA	2002	GPA 4.00/4.00
M.S. Telecommunication systems, University of Nis, Serbia,	1997	GPA 10.00/10.00
B.S, Electronics, minor Telecommunications, University of Nis, Serbia,	1993	GPA 9.97/10.00

EMPLOYMENT HISTORY

Assistant Professor	8/2002-present	Delaware State University, Dover, DE
Adjunct Professor	6/2002-7/2002	Temple University, Philadelphia, PA
Teaching/Research Assistant	9/2000-6/2002	Temple University, Philadelphia, PA
Software Engineer	6/2000-8/2000	Advanced Biometrics, Inc., Puyallup, WA
Teaching/Research Assistant	1/1998-5/2000	Washington State University, Pullman, WA
Lecturer	3/1997-12/1997	University of Nis, Serbia
Assistant Lecturer	11/1993-2/1997	University of Nis, Serbia

TEACHING EXPERIENCE

Temple University	2002	Summer I	CS-331 Database Management Systems
Delaware State University	2002	Fall	35-107 Survey of Computer Science 35-470 Database Management Systems 35-478 Operational Research
	2003	Spring	35-107 Survey of Computer Science 35-301 Bioinformatics 35-310 Data mining
		Fall	35-474 Computer networks 35-430 Artificial Intelligence 35-470 Database Management Systems 35-478 Operational Research
	2004	Spring	35-371 Advanced Databases 35-474 Computer networks
		Fall	35-470 Database Management Systems
	2005	Spring	35-301 Bioinformatics
		Fall	35-470 Database Management Systems
	2006	Spring	35-371 Advanced Databases
	2006	Fall	35-470 Database Management Systems
	2006		25-504 Modern Geometry

RESEARCH INTERESTS AND GRANTS*Research interests*

Machine learning algorithms, applied mathematics, databases, data mining, homeland security, video-analysis, bioinformatics, signal processing, image processing, spatial-temporal statistics.

Grants

Title: Creation of the Center for Research and Education in Optical Sciences and Applications (CREOSA) at Delaware State University

Agency: National Science Foundation (NSF)

Start Date: September 1, 2006

Expires: August 31, 2011

Role: Principal Investigator for subproject

Amount: \$4,959,863

Status: Funded

Title: Analysis of 3D Breast Surface Deformation During Mammographic Compression

Agency: Delaware INBRE/ NIH/NCRR

Start Date: August, 2006

Expires: August, 2008

Role: co-Principal Investigator

Amount: \$160,000

Status: Funded

Title: Investigation the Neurobiology of Sensory Processing and Learning in an Invertebrate Model System

Agency: Delaware INBRE/ NIH/NCRR

Start Date: August, 2006

Expires: August, 2008

Role: co-Principal Investigator

Amount: \$160,000

Status: Funded

Title: Environmental Cooperative Science Center

Agency: U.S. Department of Commerce NA06OAR4810164

Start Date: 9/1/2006

Expires: 8/31/2011

Role: Information theory and data analysis specialist

Amount: \$12,500,000 (DSU \$1,041,436)

Status: Funded.

Title: Delaware State University Applied Mathematics Research Center

Agency: Department of the Army, # DAAD19-03-1-0375

Start Date: August 23, 2003

Expires: August 23, 2008

Role: co-Principal Investigator
Amount: \$4,000,000
Status: Funded

Title: **MRI, Acquisition of a High Performance Computational Cluster at an HBCU for the Support of a Research and Research Training in Computer Science, Engineering and Physics**

Agency: National Science Foundation, #0320991

Start Date: September 1, 2003

Expires: August 31, 2005

Role: co-Principal Investigator

Amount: \$278,331

Status: Funded

Title: **Girls Explorations in Mathematics and Science (GEMS)**

Agency: US Department of Education, Award # P120A030031

Start Date: October 1, 2003

Expires: September 30, 2005

Role: Program faculty

DSU Principal Investigator: Dr Mazen Shahin

Amount: \$25,000

Status: Funded

Title: **Delaware Biomedical Research Infrastructure Network**

Agency: NIH—National Center for Research Resources (NCRR)

Start Date: October 1, 2001

Expires: June 1, 2004

Role: Affiliated faculty

Amount: \$1,500,000

Status: Funded

Title: **Seeds of Success: A Comprehensive Program for the Retention, Quality Training, and Advancement of STEM Students**

Agency: National Science Foundation, #0310163

Start Date: July 1, 2003

Expires: June 31, 2008

Role: Senior Personnel

Amount: \$2,498,376

Status: Funded

Title: **Delaware IDEa Network of Biomedical Research Excellence(INBRE)**

Agency: NIH—National Center for Research Resources (NCRR)

Start Date: July 2003

Expires: June 2008

Role: Affiliated faculty

Amount: 3,000,000 (at DSU)

Status: Funded

Title: Spatial Data Mining of Earth Observation Data
Agency: DSU Professional Development Fund
Start Date: January 1, 2003
Expires: May 31, 2003
Role: Principal Investigator
Amount: \$3,500
Status: Funded

CONSULTING EXPERIENCE

NLPD, 3/2005-12/2005. Intelligent System for Detecting Anomalous Behavior based on Acoustic Signals.

Savannah College of Art and Design, 2/2006. Design of video surveillance system.

HONORS AND AWARDS

Merit Award, Delaware State University, 2004-2005.

Listed in Marquis Who's Who of Emerging Leaders, 2006-present.

Listed in Marquis Who's Who in Finance and Business, 2004-present.

Listed in Marquis Who's Who in Science and Engineering, 2004-present.

Listed in Marquis Who's Who among America's Teachers, 2004-present.

Listed in Marquis Who's Who in America, 2003-present.

Travel Award, Mathematical Challenges in Scientific Data Mining Workshop, 2002.

Best Presentation Award, International Joint Conference on Neural Networks (IJCNN), 2001.

Travel Award, First SIAM International Conference on Data Mining, 2001.

Graduate Student Research Award, Temple University, 2001.

Travel Award, ISTET '97, Palermo, 1997.

Travel Award, ISTET '95, Thessaloniki, 1995.

Fellowship, Serbian Department of Science and Technology, 1994.

Summa Cum Laude, undergraduate studies finished one year before anticipated graduation date, 1993.

Scholarship, Serbian National Academy of Science and Arts, 1991-1994.

Third Prize, Serbian High School Students' Competition in Mathematics, 1989.

First Prize, Serbian High School Students' Championship "Archimedes", 1987.

Second Prize, Serbian High School Students' Championship "Archimedes", 1986.

First Prize, on District Student Competition in Photography, 1986.

The Best Young Mathematician in Generation, 1985.

Second Prize, Serbian Middle School Students' Competition in Mathematics, 1984.

INVENTIONS AND PATENTS

Z. Obradovic, T. Fiez, A. Lazarevic, S. Vucetic, **D. Pokrajac**, R. L. Hoskinson: *Systems and Methods for Knowledge Discovery in Spatial Data*, US Patent 6,865,582, Date March 8, 2005.

M. Rasamny, **D. Pokrajac**, *Interactive Virtual Expert System for Advising (InVEStA)*, Software System designed and implemented at Delaware State University, 2002-2006.

N. Loncar, **D. Pokrajac**, *Intelligent System for Detecting Anomalous Behavior based on Acoustic Signals*, 2006.

D. Pokrajac, A. Lazarevic L.J. Latecki, *Incremental Local Outlier Factor Algorithm*, Software System, 2006.

PUBLICATIONS

PUBLISHED JOURNAL ARTICLES:

1. **D. Pokrajac**, Z.Nikolic, "A Correction to Kurt Metzger's algorithm," *IEEE Trans. Communication*, Vol. 42, No. 12, pp. 2868, 1995.
2. S. Glisic, Z. Nikolic, **D. Pokrajac**, "ASK Signal Influence Rejection in DS Spread Spectrum Systems," *Facta Universitatis, Ser. Elect. and Energ.* Vol. 10, No. 1, pp. 57-63, 1997.
3. S. Glisic, Z. Nikolic, **D. Pokrajac**, P. Leppanen, "Performance Enhancement of DS Spread Spectrum systems: Two Dimensional Interference Suppression," *IEEE Trans. Communication*, Vol. 47, No. 10, pp.1549-1560, 1999.
4. **D. Pokrajac**, A. Lazarevic, Z.Obradovic, "Exploration-Exploitation Trade-Off in Machine Learning," *Facta Universitatis, Ser. Elect. and Energ.*, Vol. 14, No. 1, pp. 67-90, 2001
5. **D.Pokrajac**, T. Fiez, Z. Obradovic, "A Data Generator for Evaluating Spatial Issues in Precision Agriculture," *Precision Agriculture*, 2002, Vol.3, No. 3, pp. 259-281.
6. **D. Pokrajac**, R. Hoskinson, Z.Obradovic, "Modeling Spatial-Temporal Data with a Short Observation History," *Knowledge and Information Systems (KAIS)*, 2003, Vol.5, No. 3, pp. 368-386.
7. **D. Pokrajac**, Z.Obradovic, "Spatial-Temporal Prediction with Partial Attribute Observability," accepted to *Computers and Geoscience*.
8. **D. Pokrajac**, V. Megalooikonomou, A. Lazarevic, D. Kontos, Z. Obradovic, "Applying Spatial Distribution Analysis Techniques to Classification of 3D Medical Images," *Artificial Intelligence in Medicine*, Vol. 33, pp. 261-280, 2005.
9. L. J. Latecki, R. Mieziako, **D. Pokrajac**, "Reliability of Motion Features in Surveillance Videos," accepted to *Integrated Computer-Aided Engineering*, 2005.
10. **D. Pokrajac**, A. Lazarevic, "Unsupervised Neural Networks In Data Mining," accepted to *Facta Universitatis, Ser. Elect. and Energ.*
11. **D. Pokrajac**, J. Milutinovich, Z. Obradovic, "Toward Neural Network-Based Profit Optimization," *Facta Universitatis, Ser. Economics and Organization*, Vol. 2, No 3, pp. 261 – 275, 2005.
12. L. J. Latecki, R. Mieziako, V. Megalooikonomou, **D. Pokrajac**, "Using Spatiotemporal Blocks to Reduce the Uncertainty in Detecting and Tracking Moving Objects in Video," *International Journal of Intelligent Systems Technologies and Applications*, Vol. 1, No 3-4, pp. 376-392, 2006.

13. Z. Peric, J. Nikolic, **D. Pokrajac**, "Construction of Optimal Scalar Quantizers for Laplacian Source," *International Scientific Journal of Computing*, 2006, in press.
14. Vasileios Megalooikonomou, Despina Kontos, Dragoljub Pokrajac, Aleksandar Lazarevic, Zoran Obradovic, "An Adaptive Partitioning Approach for Mining Discriminant Regions in 3D Image Data," accepted to *Journal of Intelligent Information System*.
15. Z. Peric, J. Nikolic, **D. Pokrajac**, "Hybrid Scalar Quantizer for the Laplacian Source," *WSEAS Transactions on Communications*, Vol. 6, No 1, pp. 60-65, 2007.

CONFERENCE PAPERS

1993-1998

16. **Dragoljub Pokrajac**, Mihajlo Stefanovich, Nebojsa Zlatkovich, Zorica Nikolich, "Jitter influence on error probability at digital signal transmission", 1th Telecommunication Forum (TELFOR 93), Belgrade, November 1993.(in Serbian)
17. **Dragoljub Pokrajac**, Zorica Nikolich, "A new quadrature formula for probability error evaluation" ,The XXXVIII conference for Electronics, Telecommunication, Computers, Automatisatation and Nuclear Technology ETRAN, Nish, june 1994.
18. Zorica Nikolich, **Dragoljub Pokrajac**, "Upper probability bound evaluation at bipolar signal transmission in the presence of jitter", The XXXVIII conference for Electronics, Telecommunication, Computers, Automatisatation and Nuclear Technic ETRAN, Nish, june 1994. (in Serbian)
19. Zorica Nikolich, **Dragoljub Pokrajac**, " Switch-device pulse response influence to the PAM signal transmitted energy" , 2nd Telecommunication Forum (TELFOR 94), Belgrade, November 1994.(in Serbian)
20. **Dragoljub Pokrajac**, Zorica Nikolich, " Random-phase sinusoidal jamming influence to the DS-SS system performances" , The XXXIX conference for Electronics, Telecommunication, Computers, Automatisatation and Nuclear Technology ETRAN, Zlatibor, june 1995. (in Serbian)
21. Zorica Nikolich, **Dragoljub Pokrajac**, " Noise influence to the DS-SS linear microcellular mobile communication system behaviour" , The XXXIX conference for Electronics, Telecommunication, Computers, Automatisatation and Nuclear Technology ETRAN, Zlatibor, June 1995. (in Serbian)
22. Savo Glisich, Zorica Nikolich, **Dragoljub Pokrajac**, "ASK signal influence rejection in DS spread spectrum system" , accepted for oral presentation at The 2nd conference Telecommunication in Satellite and Cable Services (TELSIKS'95) , Nish, October 1995.
23. Bojan Lekovich, **Dragoljub Pokrajac**, Zorica Nikolich, "Traffic control smart system", accepted for oral presentation at The 2nd conference Telecommunication in Satellite and Cable Services (TELSIKS'95) , Nish, October 1995. (In Serbian)
24. Zorica Nikolic, **Dragoljub Pokrajac**, " The joint influence of both a sinusoidal jammer with a random phase and fading on the DSSS system performances ", 3rd Telecommunication Forum (TELFOR 95), Belgrade, December 1995.(in Serbian)
25. Savo Glisic, Zorica Nikolic, **Dragoljub Pokrajac**, " Optimal DS-SS signal filtering in the presence of additive noise and interference ", 3rd Telecommunication Forum (TELFOR 95), Belgrade, December 1995.(in Serbian)

26. **Dragoljub Pokrajac**, Zorica Nikolic, Bojan Dimitrijevic, "Programme implementation of Kurt Metzger's algorithm to the performance evaluation of bipolar transmission in the presence of intersymbol interference ", The first symposium ITP'95, Novi Sad, September 95. (in Serbian)
27. Zorica Nikolich, **Dragoljub Pokrajac**, "Chip pulse shape optimal choice in DS/CDMA systems with BPSK modulation scheme", accepted for oral presentation on *8th International Symposium on Theoretical Electrical Engineering (ISTET 95) Thessaloniki 1995*.
28. Zorica Nikolic, **Dragoljub Pokrajac**, Bojan Dimitrijevic, " A new approach to the evaluation of error probability in the presence of sinusoidal disturbance", The first symposium ITP'95, Novi Sad, September 95.
29. **Dragoljub Pokrajac**, "Applicative software utilisation on numerical calculi", The first symposium IT'96, Zabljak, March 1996. (in Serbian)
30. Miroslava A. Milosevic, **Dragoljub M. Pokrajac**, Dejan G. Ciric, Vladan V. Vuckovic, "The speech intelligibility of speech extracted by adaptive filtering from the complex noisy signal", The XL conference for Electronics, Telecommunication, Computers, Automatisation and Nuclear Technology ETRAN, Budva, June 1996. (in Serbian)
31. Savo Glisic, Zorica Nikolic, **Dragoljub Pokrajac**, Nenad Milosevic, "Optimal DS-SS Signal filtering in the presence of additive noise and PSK interference", The XL conference for Electronics, Telecommunication, Computers, Automatisation and Nuclear Technology ETRAN, Budva, June 1996. (in Serbian)
32. Ivan Miletic, **Dragoljub Pokrajac**, Zorica Nikolic, "Fading and shadowing influence on error probability at DS/CDMA systems", 4th Telecommunication Forum (TELFOR 96), Belgrade, November 1996.(in Serbian)
33. **Dragoljub Pokrajac**, Vladan Vuckovic, "PC Based Telephone Voice Automata Realization With a Noise Suppression Method Description ", 4th Telecommunication Forum (TELFOR 96), Belgrade, November 1996.(in Serbian)
34. Zorica Nikolic, Savo Glisic, **Dragoljub Pokrajac**, Ivan Miletic, "Performance of DS-SS/QPSK receiver with time notching in the presence of additive noise and PSK interference", The XLI conference for Electronics, Telecommunication, Computers, Automatisation and Nuclear Technology ETRAN, Zlatibor, 1997. (in Serbian)
35. **Dragoljub Pokrajac**, Zorica Nikolic, "ASK and PSK interference rejection using complex block LMS algorithm", accepted for 5th Telecommunication Forum (TELFOR 97), Belgrade, November 1997.(in Serbian)
36. Zorica Nikolic, **Dragoljub Pokrajac**, Ivan Miletic, "Multiple PSK Interference Suppression in DS-SS/QPSK Signal", 9th International Symposium on Theoretical Electrical Engineering (ISTET 97) Palermo , June 1997.
37. Zorica Nikolic, Ivan Miletic, **Dragoljub Pokrajac**, "Performance of Orthogonal Multi-carrier DS/CDMA in Non-fading and Frequency Nonselective Fading Channels", 9th International Symposium on Theoretical Electrical Engineering (ISTET 97) Palermo, June 1997.
38. I. Miletic, **D. Pokrajac**, A. Stamenkovic, Z. Nikolic, "Error Probability for Orthogonal Multi-Carrier DS/CDMA in Frequency Nonslective Fading Channels", The Third International TELSIX Symposium, Nish 1997.

39. N. Stojanovic, **D. Pokrajac**, “Quantization Noise at Non-Uniform Linear Delta Modulation”, The Third International TELSIKS Symposium, Nish 1997.
40. Z. Nikolic, **D. Pokrajac**, N. Milosevic, “Narrowband Interference Rejection in DS-SS/QPSK Systems Using Complex Block LMS Algorithm,” *Proc. CSDSP '98, Sheffield, England, pp. 383-386*, 1998.
41. **D. Pokrajac**, N. Milosevic, Z. Nikolic, “Correlation Matrix Eigenvalue Behaviour In Narrowband Interference Suppression at DS-SS/QPSK Transmission,” *Conference on Communications '98*, Bucharest, Romania, pp. 331-336, 1998.
42. T. Fiez, Z. Obradovic, R. Drossu, S. Vucetic, A. Lazarevic, **D. Pokrajac**, “Use of Terrain Analysis in Yield Map Interpretation,” *Proc. 1st International Conference on Geospatial Information in Agriculture and Forestry*, Orlando, FL, 5/31-6/3/1998.

1999

43. **D. Pokrajac**, A. Lazarevic, S. Vucetic, T. Fiez, Z. Obradovic, “Image Processing in Precision Agriculture,” *proc. TELSIKS'99*, pp. 616-619, 1999.
44. **D. Pokrajac**, T. Fiez, D. Obradovic, S. Kwek, Z. Obradovic, “Distribution Comparison for Site-Specific Regression Modeling in Agriculture,” *Proc. International Joint conference on Neural Networks*, 1999.

2000

45. Lazarevic, **D. Pokrajac**, Z. Obradovic, “An E-commerce System for Mining Distributed Spatial Databases,” *Proc. SSGRR'2000, International Conference on Advances in Infrastructure for Electronic Business, Science, and Education on the Internet*, Italy, 2000.
46. Lazarevic, **D. Pokrajac**, Z. Obradovic, “Distributed Clustering and Local Regression for Knowledge Discovery in Multiple Spatial Databases,” *Proc. European Symposium on Artificial Neural Networks*, 2000.
47. **D. Pokrajac**, T. Fiez, Z. Obradovic, “A Tool for Controlled Knowledge Discovery in Spatial Domains,” *Proc. 14th European Simulation Multiconference (ESM)*, 2000.
48. **D. Pokrajac**, Z. Obradovic, T. Fiez, “Understanding the Influence of Noise, Sampling Density and Data Distribution on Spatial Prediction Quality through the Use of Simulated Data,” *Proc. 14th European Simulation Multiconference (ESM)*, 2000.
49. **D. Pokrajac**, Z. Obradovic, “Learning Heterogeneous Functions from Small and Non-Uniform Samples,” *Proc. International Joint Conference on Neural Networks*, 2000.
50. **D. Pokrajac**, Z. Obradovic, “Combining Regressive and Auto-Regressive Models for Spatial-Temporal Prediction,” *ICML Workshop*, 2000.

2001

51. A. Lazarevic, **D. Pokrajac**, V. Megalooikonomou, Z. Obradovic, “Distinguishing Among 3-D Distributions for Brain Image Data Classification,” *Proc. 4th International Conference on Neural Networks and Expert Systems in Medicine & Healthcare, NNESSMED*, Milos Island, 2001.
52. **D. Pokrajac**, A. Lazarevic, Z. Obradovic, V. Megalooikonomou, “Classification of Brain Image Data using Measures of Distributional Distance,” *7th Annual Meeting of the Organization for Human Brain Mapping, HBM 2001*, 2001.

53. **D.Pokrajac**, Z. Obradovic, "Neural Network-Based Software for Fertilizer Optimization in Precision Farming," *Proc. International Joint Conference on Neural Networks*, Vol. 3, pp. 2110-2115, 2001.
54. **D. Pokrajac**, Z. Obradovic, "A Neural Network-Based Method for Site-Specific Fertilization Recommendation," *ASAE Annual Meeting*, paper # 01-3111, 2001.
55. **D. Pokrajac**, Z. Obradovic, "Improved Spatial-Temporal Forecasting through Modeling of Spatial Residuals in Recent History," *First SIAM International Conference on Data Mining*, 2001.

2002

56. V. Megalooikonomou, **D.Pokrajac**, A. Lazarevic, Z.Obradovic, "Effective Classification of 3D Image Data using Partitioning Methods," *SPIE Visualization and Data Analysis Conference*, 2002.
57. R. Hoskinson, **D.Pokrajac**, Z.Obradovic, A. Lazarevic, "The Unpredictability of Soil Fertility across Space and Time", *6th International Conference on Precision Agriculture, Minneapolis, MN*, 2002.
58. **D.Pokrajac**, R. Hoskinson, A. Lazarevic, Z.Obradovic, "Spatial-Temporal Techniques for Prediction and Compression of Soil Fertility Data," *6th International Conference on Precision Agriculture, Minneapolis, MN*, 2002.
59. **D.Pokrajac**, "Spatial-Temporal Data Mining on Data with Short Observation History," *IPAM Mathematical Challenges in Scientific Data Mining Workshop*, 2002.

2003

60. **D. Pokrajac**, K. Amoako, H. Patel, J. Brooks, N. Cenat, K. Marcus, S. Darden, "Data Mining in Geosciences", *Proc. 6th IEEE International TELSIKS Conference*, Nis, 2003, vol. 2, pp. 530-533.
61. **D. Pokrajac**, J. Milutinovich, D. Jankovic, "On Hypothesis Testing in Multidimensional Outlier Detection", *Proc. 6th IEEE International TELSIKS Conference*, Nis, 2003, vol. 2, pp. 534-537.
62. S.Vucetic, **D. Pokrajac**, H. Xie, and Z.Obradovic "Detection of Unusual Biological Sequences Using Class-Conditional Distribution Models," *Third SIAM International Conference on Data Mining*, 2003.
63. **D.Pokrajac**, L. J. Latecki. "Spatiotemporal Blocks-Based Moving Objects Identification and Tracking," *Joint International Workshop on Visual Surveillance and Performance Evaluation of Tracking and Surveillance (VS-PETS)*, 2003.
64. V. Megalooikonomou, D. Kontos, **D.Pokrajac**, A. Lazarevic, Z. Obradovic, O. Boyko, A. Saykin, J. Ford, F. Makedon. "Classification and Mining of Brain Image Data Using Adaptive Recursive Partitioning Methods: Application to Alzheimer Disease and Brain Activation Patterns," *OHBM'03 (Organization for Human Brain Mapping)*, 2003.

2004

65. **D.Pokrajac**, A.Lazarevic, T.Singleton, Z.Obradovic, "Localized Neural Network Based Distributional Learning for Knowledge Discovery in Protein Databases," *Proc. International Joint Conference on Neural Networks*, 2004.
66. **D.Pokrajac**, L. J. Latecki, R. Mieziako, "Evaluating Reliability of Motion Features in Surveillance Videos," *NIST Performance Metrics for Intelligent Systems Workshop (PerMIS '04)*, 2004.

67. L. J. Latecki, R. Mieziako, **D.Pokrajac**, "Motion Detection Based on Local Variation of Spatiotemporal Texture," *OTCBVS04*, 2004.
68. **D.Pokrajac**, L. J. Latecki, "Entropy-Based Approach for Detecting Feature Reliability," *48th ETRAN*, 2004, *invited paper*.
69. **D.Pokrajac**, H.Patel, M.Rasamny, "Inheritance Constraints Implementation in PostgreSQL," *48th ETRAN*, 2004.
70. H.Patel, F.Hudnall, N.Cenat, T.King, M.Rasamny, **D.Pokrajac**, "Interactive Virtual Expert System for Advising (InVESTa)," *ADMI'04*, 2004.
71. D. Kontos, V. Megalooikonomou, **D.Pokrajac**, A. Lazarevic, Z. Obradovic, O. B. Boyko, J. Ford, F. Makedon, A. J. Saykin, "Extraction of Discriminative Functional MRI Activation Patterns and an Application to Alzheimer's Disease," *MICCAI*, 2004.
72. **D. Pokrajac**, A. Lazarevic, "Applications of Unsupervised Neural Networks in Data Mining," *Proc. NEUREL 2004*.

2005

73. Z. Peric, J. Nikolic, **D. Pokrajac**, "Analysis of Support region for Laplacian Source's Scalar Quantizers," *Proc. TELSIKS 2005*.
74. L. J. Latecki, R. Mieziako, **D.Pokrajac**, "Tracking Motion Objects in Infrared Videos," *in Proc. AVSS 2005*.
75. **D. Pokrajac**, V. Zeljkovic, L.J. Latecki, "Spatial-Temporal Algorithm for Moving Objects Detection in Infra Red Video Sequences," *In Proc. TELSIKS 2005*.
76. V. Zeljkovic, **D. Pokrajac**, "Improved Illumination Independent Moving Object Detection Algorithm in Infrared Video Sequences", *In Proc. ICEST 2005*.
77. L. J. Latecki, R. Mieziako, **D.Pokrajac**, "Activity and Motion Detection Based on Measuring Texture Change," 5th Industrial Conference on Data Mining ICDM'2005, Leipzig, 2005.
78. V. Zeljkovic, **D. Pokrajac**, L. J. Latecki "Noise-Robust Spatial-Temporal Algorithm for Moving Object Detection", *In Proc. 49th ETRAN*, 2005.
79. **D. Pokrajac**, V. Zeljkovic, L. J. Latecki, "Noise-Resilient Detection of Moving Objects Based on Spatial-Temporal Blocks," *In Proc. 47th International Symposium ELMAR-2005 focused on Multimedia Systems and Applications*, 2005.
80. V. Zeljkovic, **D. Pokrajac**, A. Dorado, and E. Izquierdo, "Application of the Improved Illumination Independent Moving Object Detection Algorithm on the Real Video Sequence," *In Proc. 6th International Workshop on Image Analysis for Multimedia Interactive Services, WIAMIS 2005*.
81. L. J. Latecki, R. Mieziako, **D.Pokrajac**, "Instantaneous Reliability Assessment of Motion Features in Surveillance Videos Presentation," *IS&T/SPIE Symposium on Electronic Imaging*, 2005.

2006

82. V. Zeljkovic, **D. Pokrajac**, "Motion Detection Based Multimedia Supported Intelligent Video Surveillance System," *In Proc. 48th International Symposium ELMAR-2006*.

83. N. Robinson, **D. Pokrajac**, M. Harrington, K. Patel, "Analysis of Mollusk Brain Signals Recorded by a Multi-Electrode Array," *In Proc. 50th ETRAN, 2006*.
84. V. Zeljkovic, **D. Pokrajac**, "Improved Spatial-Temporal Moving Object Detection Method Resistant to Noise," *In Proc. ICEST 2006*.
85. **D. Pokrajac**, M. Rasamny, "Interactive Virtual Expert System for Advising," *Proc. 36th ASEE/IEEE Frontiers in Education Conference, 2006*, in press.
86. **D. Pokrajac**, A. Lazarevic, J. Nikolic, "Applications of Neural Networks in Network Intrusion Detection," *Proc. NEUREL 2006*.
87. Z. Peric, J. Nikolic, **D. Pokrajac**, "Optimal Designing Scalar Quantizers using a Hybrid Quantization Method for the Laplacian Source," *Proc. WSEAS 2006*.

2007

88. **D. Pokrajac**, A. Lazarevic, L.J. Latecki, "Incremental Local Outlier Detection for Data Streams," accepted for *IEEE Symposium on Computational Intelligence and Data Mining, 2007*, in press.

BOOK:

89. Z. Nikolic, N. Stojanovic, **D. Pokrajac**, V. Smiljanic, N. Milosevic, *Telecommunication Laboratory Manual*, Elektronski Fakultet Nis, 1998, (in Serbian).

BOOK CHAPTERS:

90. L. J. Latecki, R. Miezianko, **D. Pokrajac**, S. Gao, "Selective Hypothesis Tracking in Surveillance Videos", book chapter in *Advances in Applied and Computational Mathematics*, Nova Science Publishers, 2006.

TECHNICAL REPORTS:

91. **D. Pokrajac**, Z. Obradovic, Spatial-Temporal Autoregressive Model on Uniform Sampling Grid, Technical Report CIS TR 2001-05, Temple University, 2001.
92. **D. Pokrajac**, Z. Obradovic, Experiments with spatial-temporal autoregressive models on uniform grid, Technical Report CIS TR 2002-01, Temple University, 2002.
93. **D. Pokrajac**, M. Rasamny, *Functionality And Design Aspects Of Interactive Virtual Expert System For Advising (INVESTA)*, Technical Report TR-CIS4001, Delaware State University, 2004.

PROFESSIONAL ASSOCIATIONS

Member, Association for Computer Machinery (**ACM**).

Member, The Institute of Electrical and Electronics Engineers (**IEEE**).

Member, IEEE Women in Engineering society, 2006-present.

LEADERSHIP

Acting Director, Applied Mathematics Research Center, 2005, 6.

Acting Chair, Graduate Department of Applied Mathematics and Theoretical Physics, 2005, 6.

Senator, Delaware State University Faculty Senate, 2003-Present.

Senator, University Student Union, 1994.

Member of Advisory Board, University Cultural Center, 1993-94.

Senator, Faculty of Electronics, University of Nis, 1989-90.

President, High School Student Union, 1987-88.

OTHER

Founding member of Nikola Tesla Inventors' Society, Philadelphia.

Founder, DAISEC, LLC.

Initiate collaboration with University of Nis, University of Belgrade and University of Novi Sad, Serbia and organize trip of University President, College Dean and VP for International Affairs to Serbia.

Initiate collaboration with Delaware Department of Safety and Homeland Security and University of Maryland MindLab on Delaware Homeland Security Institute.

Work on establishing contacts and collaboration with industry (with Office of Associate Provost for Research).

Participate in creation of Masters Program in Homeland Security.

Participate in creation of PhD Program in Applied Mathematics and Theoretical Physics.

Participate in creation of DSU Program in Computational Biology.

Create curricula for Advanced Databases, Scientific Computing, Genetic Algorithms, Artificial Intelligence, and Machine Learning courses.

Work on computer-based academic advising with the Registrar's Office.

Participate in founding of Delaware Center for Scientific and Applied Computation (DESAC) at Delaware State University.

Participate in founding of Applied Mathematics Research Center (AMRC) at Delaware State University.

Work on founding Interuniversity Center for Balkan Economic Development (With University of Nis).

Supervise several undergraduate and graduate students in research.

Collaborate with The Greater Philadelphia Region Alliance for Minority Participation on introducing minority students in research activities.

Member of Faculty Senate.

Member of Search Committees for tenure track professor positions at Biotechnology, Computer Science, Applied Mathematics and Theoretical Physics.

Participate in College Strategic Planning committee.

Participate in Departmental Curriculum and Personnel committees.

Organize and participate in Seminar for Computer Science and Math students (data mining, Matlab programming).

Organize Applied Mathematics research seminar.

Advise Students' ACM chapter and Students' Computer Science club.

Work with Serbian Public Television on preservation of 2'' VTR-Q Archival Tapes.

Have several TV and radio appearances including three 1-hour live broadcast shows, radio program on Nikola Tesla, an American Inventor, and live broadcast reporting from Nikola Tesla Monument unveiling from Niagara Falls, ON.

Member, Serbian Eastern Orthodox Church, Philadelphia, 2000-present.

Treasurer, 2002-2005, Serbian Eastern Orthodox Church, Philadelphia.

Member, NAACP, 2005-present.