

Curriculum Vitae

Petar M. Djurić

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EDUCATION:

- **Ph.D., Electrical Engineering** 1990
University of Rhode Island, United States
- **M.S., Electrical Engineering** 1986
University of Belgrade, Yugoslavia
- **B.S., Electrical Engineering** 1981
University of Belgrade, Yugoslavia

ACADEMIC APPOINTMENTS:

- **Professor** 2001-present
Stony Brook University
Stony Brook, NY
- **Associate Professor** 1996-2001
Stony Brook University
Stony Brook, NY
- **Director of Undergraduate Studies** 1996-1999
Department of Electrical and Computer Engineering
Stony Brook University
- **Assistant Professor** 1990-1996
Stony Brook University
Stony Brook, NY
- **Teaching/Research Assistant** 1986-1990
University of Rhode Island
Kingston, RI
- **Research Associate** 1981-1986
Institute of Nuclear Sciences - Vinča
University of Belgrade
Belgrade, Yugoslavia

AWARDS AND HONORS:

- Technical Achievement Award, European Association for Signal Processing (EURASIP) 2012
For contributions to the theory and application of Monte Carlo-based methods to signal processing
- Distinguished Lecturer of the Institute of Electrical and Electronics Engineers (IEEE) Signal Processing Society 2008-2009
- Chair of Excellence of Universidad Carlos III de Madrid-Banco de Santander 2008-2009

- IEEE Signal Processing Magazine Best Paper Award 2007
- Fellow of the IEEE 2006
For contributions to Monte Carlo – based methods for signal processing
- Visiting Professorship 2005
Ministerio de Educación y Ciencia (Education and Science Department) of Spain
Universidad Carlos III de Madrid, Madrid and Universidade da Coruña, A Coruña, Spain
- Chercheur invité 2012
University of Nice
Nice, France
- Visiting Professorship 2000, 2002, 2004, 2008, and 2012
University of Toulouse
Toulouse, France
- Recipient of two NSF ITR grants 2000 and 2002
- Visiting Fellow 1997 - present
Corpus Christi College, University of Cambridge, Cambridge, UK
- IEEE Region 1 Award for New Technical Concepts in Electrical Engineering 1996
Citation: “Application of Bayesian statistical modeling to engineering problems”

PUBLICATIONS (350+):

Journal papers published since 2013:

- J-1 Y. Wang and P. M. Djurić, “Social learning in linear networks of heterogeneous agents,” *Digital Signal Processing* (accepted)
- J-2 D. Dardari, P. Closas, and P. M. Djurić, “Indoor tracking: Theory, methods, and technologies,” *IEEE Transactions on Vehicular Technology* (accepted)
- J-3 D. Dardari, P. Closas, and P. M. Djurić, “Indoor localization, tracking, and mapping with heterogeneous technologies,” Editorial, *IEEE Transactions on Vehicular Technology* (accepted)
- J-4 R. Hostettler and P. M. Djurić, “Vehicle Tracking Based on Magnetometer and Accelerometer Sensor Measurements,” *IEEE Transactions on Vehicular Technology* (accepted)
- J-5 M. Bolić, M. Rostamian, and P. M. Djurić, “Proximity detection with RFID: A step toward the Internet of Things,” *Pervasive Computing* (accepted)
- J-6 T. Li, M. Bolić, P. M. Djurić, “Resampling methods for particle filtering,” *Signal Processing Magazine* (accepted)
- J-7 A. Bravo and P. M. Djurić, “Cooperative communications with mesh networks of decode-and-forward relays,” *Transactions on Signal Processing*, 63(1), pp. 5-17, 2015
- J-8 K. Dedecius, J. Reichl, and P. M. Djurić, “Sequential estimation of mixtures in diffusion networks,” *IEEE Signal Processing Letters*, 2(2), pp. 197-201, 2015
- J-9 S. Dash, J. G. Quirk, and P. M. Djurić, “Fetal heart rate classification using generative models,” *IEEE Transactions on Biomedical Engineering* 61(11), 2796-2805, 2014
- J-10 Z. Weng and P. M. Djurić, “Efficient estimation of linear parameters from correlated node measurements over networks,” *IEEE Signal Processing Letters*, 21(11), 1408-1412, 2014.
- J-11 O. Hlinka, F. Hlawatsch, and P. M. Djurić, “Consensus-based distributed particle filtering with distributed proposal adaptation,” *Transactions on Signal Processing*, vol. 62(12), pp. 3029-3041, 2014.
- J-12 Z. Weng and P. M. Djurić, “A search-free DOA estimation algorithm for coprime arrays,” *Digital Signal Processing*, vol. 24(2014), pp. 27-33, 2014.
- J-13 L. Geng, M. F. Bugallo, A. Athlye, and P. M. Djurić, “Indoor tracking with RFID systems,” *IEEE Journal of Selected Topics in Signal Processing*, vol. 8(1), pp. 96-105, 2014.

- J-14 D. H. Dini, P. M. Djurić, and D. P. Mandić, "The augmented complex particle filter," *IEEE Transactions on Signal Processing*, vol. 61(17), pp. 4341-4346, 2013.
- J-15 E. Arias-de-Reyna and P. M. Djurić, "Indoor localization with range-based measurements and little prior information," *IEEE Sensors Journal*, vol. 13(5), pp. 1979-1987, 2013.
- J-16 Y. Wang and P. M. Djurić, "A gossip method for optimal consensus on a binary state from binary actions," *IEEE Journal of Selected Topics in Signal Processing*, vol. 7(2), pp. 274-283, 2013.
- J-17 A. Athalye, V. Savić, M. Bolić, and P. M. Djurić, "A novel semi-passive RFID system for indoor localization," *IEEE Sensors Journal*, vol. 13(2), pp. 528-537, 2013.
- J-18 J. Míguez, D. Crisan, and P. M. Djurić, "On the use of sequential Monte Carlo methods for maximum a posteriori sequence estimation and stochastic global optimization," *Statistics and Computing*, 23(1), 91-107, 2013.
- J-19 O. Hlinka, F. Hlawatsch, and P. M. Djurić, "Distributed particle filtering in agent networks," *IEEE Signal Processing Magazine*, vol. 30(1), pp. 61-81, 2013.

Refereed conference papers published since 2013:

- C-1 K. Dedecius and P. M. Djurić, "Diffusion filtration with approximate Bayesian computation," *Proceedings of the IEEE International Conference on Acoustics, Speech, and Signal Processing*, Brisbane, Australia, 2015.
- C-2 I. Urteaga and P. M. Djurić, "Particle filtering of ARMA processes of unknown order and parameters," *Proceedings of the IEEE International Conference on Acoustics, Speech, and Signal Processing*, Brisbane, Australia, 2015.
- C-3 Y. Wang and P. M. Djurić, "Bayesian social learning in linear networks of agents with random behavior," *Proceedings of the IEEE International Conference on Acoustics, Speech, and Signal Processing*, Brisbane, Australia, 2015.
- C-4 L. Geng, M. F. Bugallo and P. M. Djurić, "Real-time self-tracking in the Internet of Things," *Proceedings of the IEEE International Conference on Acoustics, Speech, and Signal Processing*, Brisbane, Australia, 2015.
- C-5 J. Beaudeau, M. F. Bugallo and P. M. Djurić, "On optimal mobile RSSI-sensor positioning for multi target tracking," *Proceedings of the IEEE International Conference on Acoustics, Speech, and Signal Processing*, Brisbane, Australia, 2015.
- C-6 M. F. Bugallo and P. M. Djurić, "Multiple particle filtering with improved efficiency and performance," *Proceedings of the IEEE International Conference on Acoustics, Speech, and Signal Processing*, Brisbane, Australia, 2015.
- C-7 M. Bolić, M. Rostamian, and P. Djurić, "Proximity detection with RFID in the Internet of Things," *Proceedings of the Asilomar Conference on Signals, Systems, and Computers*, Asilomar, CA 2014.
- C-8 Z. Weng and P. M. Djurić, "Consensus for continuous belief functions," *Proceedings of the European Signal Processing Conference*, Lisbon, Portugal, 2014.
- C-9 S. Dash and P. M. Djurić, "On the segmentation of switching autoregressive processes by nonparametric Bayesian methods," *Proceedings of the European Signal Processing Conference*, Lisbon, Portugal, 2014.
- C-10 Y. Wang and P. M. Djurić, "On sequential estimation of linear models from data with correlated noise," *Proceedings of the European Signal Processing Conference*, Lisbon, Portugal, 2014.
- C-11 M. F. Bugallo and P. M. Djurić, "Gaussian particle filtering in high-dimensional systems," *Proceedings of the IEEE Statistical Signal Processing Workshop*, Gold Coast, Australia, 2014.
- C-12 P. M. Djurić and A. Bravo, "Cooperative mesh networks with EGC detectors," *Proceedings of the IEEE 8th Sensor Array and Multichannel Signal Processing Workshop*, La Coruña, Spain, 2014.
- C-13 Z. Shen and P. M. Djurić, "Distributed Bayesian learning with a Bernoulli model," *Proceedings of the IEEE International Conference on Acoustics, Speech, and Signal Processing*, Florence, Italy, 2014.
- C-14 J. Beaudeau, M. F. Bugallo, and P. M. Djurić, "Analysis of the cross-target measurement fusion likelihood for RSSI-based sensors," *Proceedings of the IEEE International Conference on Acoustics, Speech, and Signal Processing*, Florence, Italy, 2014.

- C-15 Y. Wang and P. M. Djurić, "Sequential Bayesian learning in linear networks with random decision making," *Proceedings of the IEEE International Conference on Acoustics, Speech, and Signal Processing*, Florence, Italy, 2014.
- C-16 M. F. Bugallo and P. M. Djurić, "Particle filtering in high-dimensional systems with Gaussian approximations," *Proceedings of the IEEE International Conference on Acoustics, Speech, and Signal Processing*, Florence, Italy, 2014.
- C-17 Z. Weng and P. M. Djurić, "Efficient learning by consensus over regular networks," *Proceedings of the IEEE International Conference on Acoustics, Speech, and Signal Processing*, Florence, Italy, 2014.
- C-18 I. Urteaga and P. M. Djurić, "Estimation of ARMA state processes by particle filtering," *Proceedings of the IEEE International Conference on Acoustics, Speech, and Signal Processing*, Florence, Italy, 2014.
- C-19 P. M. Djurić and M. F. Bugallo, "Particle filtering for high-dimensional systems," *Proceedings of the IEEE Workshop on Computational Advances in Multi-sensor Adaptive Processing*, Saint Martin, 2013.
- C-20 Y. Wang and P. M. Djurić, "Reaching optimal Bayesian belief over networks in the presence of communication noise," *Proceedings of Global SIP*, Austin, TX, 2013.
- C-21 Y. Wang and P. M. Djurić, "Sequential estimation of linear models in distributed settings," *Proceedings of the European Signal Processing Conference*, Marrakesh, Morocco, 2013.
- C-22 Z. Weng and P. M. Djurić, "Distributed estimation in the presence of correlated noises," *Proceedings of the European Signal Processing Conference*, Marrakesh, Morocco, 2013.
- C-23 J. Beaudeau, M. F. Bugallo, and P. M. Djurić, "A mobile system for non-centralized target tracking in presence of dynamic interferences," *Proceedings of the European Signal Processing Conference*, Marrakesh, Morocco, 2013.
- C-24 Y. Wang and P. M. Djurić, "Reaching Bayesian consensus in cognitive systems by decision exchanges," *Proceedings of the European Signal Processing Conference*, Marrakesh, Morocco, 2013.
- C-25 L. Geng, M. F. Bugallo, and P. M. Djurić, "Tracking with asynchronous binary readings and layout information in RFID systems with sense-a-tags," *Proceedings of the European Signal Processing Conference*, Marrakesh, Morocco, 2013.
- C-26 Z. Weng and P. M. Djurić, "Data fusion based on convex optimization," *Proceedings of the IEEE International Conference on Acoustics, Speech, and Signal Processing*, Vancouver, Canada, 2013.
- C-27 P. M. Djurić and A. Ferrari, "Models with products of Dirichlet processes," *Proceedings of the IEEE International Conference on Acoustics, Speech, and Signal Processing*, Vancouver, Canada, 2013.
- C-28 D. E. Johnston, I. Urteaga, and P. M. Djurić, "Replication and optimization of hedge fund risk factor exposures," *Proceedings of the IEEE International Conference on Acoustics, Speech, and Signal Processing*, Vancouver, Canada, 2013.
- C-29 L. Geng, M. F. Bugallo and P. M. Djurić, "Tracking with RFID asynchronous measurements by particle filtering," *Proceedings of the IEEE International Conference on Acoustics, Speech, and Signal Processing*, Vancouver, Canada, 2013.

PROFESSIONAL ACTIVITIES AND AFFILIATIONS (since 2013):

- Editor-in-Chief of the *IEEE Transactions on Signal and Information Processing over Networks* 2015
- Member of the Publication Board of the *IEEE Signal Processing Society* 2015–2017
- General Co-Chair of the *IEEE Workshop on Computational Advances in Multi-sensor Adaptive Processing*, Cancun, Mexico 2015
- Member of the Awards Committee of the Network of Excellence in Wireless Communications (project funded under the umbrella of the 7th Framework Program of the European Commission) 2015
- Guest Editor of a special issue on "Indoor localization, tracking, and mapping with heterogeneous technologies" for the *IEEE Transactions on Vehicular Technology* 2015

- Organizer of a special session on wireless localization, *Asilomar Conference on Signals, Systems, and Computers*, Asilomar, CA 2015
- Member of the IEEE Signal Processing Society Nominations and Appointments Committee 2014 – 2015
- Treasurer of the *IEEE International Conference on Acoustics, Speech, and Signal Processing*, Florence, Italy 2014
- Co-chair of a special issue on “Indoor localization, tracking, and mapping with heterogeneous technologies” for the *IEEE Transactions on Vehicular Technology* 2014
- Co-organizer of a special session on “Bayesian nonparametrics for signal processing” for the *IEEE Workshop on Machine Learning for Signal Processing*, Reims France 2014
- Chair of a special session on “Wireless localization” for the *Asilomar Conference on Signals, Systems, and Computers* 2014
- Member of Technical Program Committee of *EUSIPCO*, Lisbon, Portugal 2014
- Member of Technical Program Committee of the *IEEE GLOBECOM*, Austin, TX 2014
- Organizer of a special session on “Advances in Monte Carlo Methods for Signal Processing,” *IEEE Workshop on Computational Advances in Multi-sensor Adaptive Processing*, Saint Martin 2013
- Member of the Awards Committee of the European Network of Excellence 2013
- Organizer of a special session on “Diffusion of Information over Multi-Agent Networks,” *the European Signal Processing Conference*, Marrakesh, Morocco, 2013 2013
- Member-at-Large of the Board of Governors of the IEEE Signal Processing Society 2011-2013