

## Dr Milica Djurić-Jovičić

**Name and surname:** Milica Djurić-Jovičić

**Date and place of birth:** 19.02.1982., Belgrade, Serbia

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### EDUCATION DEGREES:

- 2012** PhD in Biomedical Engineering (Department for System Control and Signal Processing), School of Electrical Engineering, University of Belgrade, Serbia.  
PhD thesis: *Inertial sensors signal processing methods for gait analysis of patients with impaired gait pattern*, supervised by prof. Dejan Popović.
- 2007** BSc. in Electrical Engineering, School of Electrical Engineering, University of Belgrade, Serbia, Telecommunications and Information technologies department.

### WORK EXPERIENCE:

- 2014-** Acting director at Innovation center, School of Electrical Engineering, University of Belgrade, Belgrade, Serbia. ([www.ic.etf.rs](http://www.ic.etf.rs))
- 2013-2014** Deputy director at Innovation center, School of Electrical Engineering, University of Belgrade, Belgrade, Serbia. ([www.ic.etf.rs](http://www.ic.etf.rs))
- 2007-2013** Research assistant at Laboratory for Biomedical Instrumentation and Technologies, Department for Signal and systems, School of Electrical Engineering, University of Belgrade, Serbia. ([www.bmit.etf.rs](http://www.bmit.etf.rs))
- 2008-2012** Researcher in the field of motor control and rehabilitation in “Tecnalia Serbia“, Belgrade, Serbia. Project manager and lead researcher for “Wireless sensor system for gait analysis” project.

### PROJECTS:

- 2008-2010** #145041, MPNTR, “Functional Electrical Therapy (FET) for forming motor patterns after cerebrovascular insult”, National project funded by Serbian Ministry of Education, Science and Technological Development.
- 2009-2011** SENSY (Wireless sensor system for gait analysis) funded by Tecnalia Research Center, San Sebastian, Spain.
- 2009-2011** TEMPUS JP 144537-2008, “Curricula Reformation and Harmonisation in the Field of Biomedical Engineering”, International project funded by EU.
- 2011-2015** #175016, MPNTR, “The effects of assistive systems in neurorehabilitation of sensory-motor systems”, National project funded by Serbian Ministry of Education, Science

and Technological Development.

**2014-2015** "Development of strategies for better understanding and quantification of upper limb motor synergies", The program of cooperation between the Republic of Serbia and the Republic of France in the field of scientific and technical research "Pavle Savic".

**2014-2015** **Innovation project, MPNTR**, "System for interactive therapy and evaluation of children with autism", National project funded by Serbian Ministry of Education, Science and Technological Development.

## **PUBLICATIONS:**

Dr Milica Djurić-Jovičić is the author or co-author of 8 publications in international journals, 1 national journal, 13 international conferences, and 9 national conferences. She is also the reviewer of international scientific journals, such as: IEEE Transactions on Neural Systems and Rehabilitation, IEEE Transactions on Biomedical Engineering, Gait and Posture, Sensors, Medical Engineering and Physics.

### *International journals:*

- [1] Djordjević A.R., **Djurić M.D.**, Tošić D.V., Sarkar T.K., "On compact printed-circuit transmission lines", Microwave and Optical Technology Letters, Nov. 2007, Vol. 49, pp. 2706-2709, ISSN 0895-2477 (M23)
- [2] Kojović J., **Djurić-Jovičić M.**, Došen S., Popović M.B., Popović D.B., "Sensor-driven four-channel stimulation of paretic leg: Functional electrical walking therapy", Journal of Neuroscience Methods, June 2009, Volume 181(1), pp. 100-105 (M23)
- [3] Popović M.B., **Djurić-Jovičić M.**, Petrović I., Radovanović S., Kostić V., "A simple method to assess freezing of gait in Parkinson's disease patients", Braz J Med Biol Res, September 2010, Volume 43(9), pp. 883-889 (M23)
- [4] **Djurić-Jovičić M.**, Jovičić N., Popović D.B., "Kinematics of Gait: New Method for Angle Estimation Based on Accelerometers", Sensors, Nov. 2011, Volume 11(11), pp. 10571-10585 (M21)
- [5] **Djurić-Jovičić M.**, Jovičić N., Popović D.B., Djordjević A.R., "Nonlinear Optimization for Drift Removal in Estimation of Gait Kinematics Based on Accelerometers", Journal of Biomechanics, , November 2012, Volume 45(16), pp. 2849-2854. (M21)
- [6] **Djurić-Jovičić M.**, Jovičić N., Radovanović S., Stanković I., Popović M., Kostić V., "Automatic Identification and Classification of Freezing of Gait Episodes in Parkinson's Disease Patients," Neural Systems and Rehabilitation Engineering, IEEE Transactions on, ISSN: 1063-6528, Institute of Electrical and Electronics Engineers, 2013, vol.PP, no.99, pp.1,1, doi: 10.1109/TNSRE.2013.2287241. (M21)
- [7] **Djurić-Jovičić M.**, Jovičić N., Radovanović S., Kresojević N., Kostić V., Popović M. "Quantitative and qualitative gait assessments in Parkinson's disease patients". Vojnosanitetski preglod, ISSN: 0042-8450, Military Medical Academy, INI, 2013. (M23)
- [8] Djordjević A., Tošić D., **Djurić-Jovičić M.**, "A theorem on repeated filtering," Journal of Circuits, Systems, and Computers, vol. 23, no. 10, pp. 1450136-1-11 (11 pages), December 2014. doi 10.1142/S0218126614501369. (M23)

### *National journals:*

- [1] \*Djordjević, A.R., Djurić, M.D., "Printed one-dimensional periodic structures for guiding electromagnetic waves", 8th meeting of the Division of Technical Sciences, Serbian Academy of Sciences and Arts, June 2007, Glas of Serbian Academy of Sciences and Arts, Division of Technical Sciences, vol. CDXI, no. 36, pp. 13-33.

### *International conferences:*

- [1] Djordjević A.R., **Djurić M.D.**, Nicolai L., "Multiband modem antenna for cellular networks", Applied Computational Electromagnetics Society (ACES) Conference, Syracuse, N.Y., April 19-23, 2004., S06P02 (M33).
- [2] **Djurić M.**, "Automatic Recognition of Gait Phases from Accelerations of Leg Segments", Proceedings from the 9th Symposium on Neural network Applications in Electrical Engineering, Neurel 2008,

- September 25-27, 2008, Belgrade, Serbia, ISBN 878-1-4244-2904-2, IEEE Catalog Number: CFP08481-PRT, pp. 121-124 (M33).
- [3] **Djurić-Jovičić M.**, Milovanović I.P., Jovičić N.S., Popović D.B., “Reproducibility of BUDA Multisensor System for Gait Analysis”, Proceedings of IEEE EUROCON Conference, EUROCON 2009, May 18-23, 2009, St.Petersburg, Russia, pp. 108-11 (M33).
  - [4] **Djurić-Jovičić M.**, Milovanović I.P., Jovičić, N.S., Popović D.B., “Walkaround assisted walking of stroke patients”, Proceedings from the Medical Physics and Biomedical Engineering Conference, September 7-12, 2009 Munich, Germany, pp. 299-301 (M33).
  - [5] **Djurić-Jovičić M.**, Popović M., Petrović I., Radovanović S., Kostić V., “Freezing vs no freezing steps in Parkinsons disease patients”, Abstracts of the XVIII Congress of the International Society of Electrophysiology and Kinesiology, ISEK 2010, 16-19 June 2010, Aalborg, Denmark [CD-ROM]. ed. / Deborah Falla; Dario Farina. Aalborg: Department of Health Science and Technology. Aalborg University. , 2010.
  - [6] Milovanović I., **Djurić-Jovičić M.**, “Polymyography during hemiplegic walking: Implications for control of FES”, Proceedings from the 15th International Functional Electrical Stimulation Society Conference, IFESS 2010, September 8-12, 2010, Vienna, Austria, pp. 203-205 (M22).
  - [7] **Djurić-Jovičić M.**, Jovičić N.S., Milovanovic I., Radovanović S., Kresojevic N., Popović M.B., “Classification of Walking Patterns in Parkinson’s Disease Patients Based on Inertial Sensor Data”, Proceedings from the 10th Symposium on Neural network Applications in Electrical Engineering, Neurel 2010, September 23-25, 2010, Belgrade, Serbia, pp. 3-6 (M33).
  - [8] **Djurić-Jovičić M.**, Jovičić N., Popović D.B., “The Influence of Heel Height on Gait Pattern”, Proceedings from the 5th European Conference of the International Federation for Medical and Biological Engineering, IFMBE 2011, vol. 37, isbn: 978-3-642-23507-8, September 14-18, 2011 Budapest, Hungary, pp. 872-875 (M33).
  - [9] **Djurić-Jovičić M.**, Miler-Jerković V., “Intra-subject stride-to-stride variability: selecting subject’s representative gait pattern”, Proceedings of the 19th Telecommunication forum, TELFOR 2011, November 22-24, 2011, Belgrade, Serbia, pp. 51-54 (M34).
  - [10] Miler-Jerković V., **Djurić-Jovičić M.**, Popović M., “PCA Sensitivity: The Role of Representative and Outlier Strides in Gait Sequence“, Proceedings from the 11th Symposium on Neural network Applications in Electrical Engineering, Neurel 2012, September 20-22, 2010, Belgrade, Serbia, pp. 123-126 (M33).
  - [11] Pejčić N., Petrović V., Miljković N., **Djurić-Jovičić M.**, Popović D., “Ergonomic risk during dental work“, Proceedings of the 18th Congress of the Balkan Stomatological Society (BaSS), 25-28 April 2013. Skopje, Macedonia, pp. 209, (M34)
  - [12] **Djurić-Jovičić M.**, Radovanović S., Petrović I., Azevedo C., Mann G., Popović M.B., “The impact of functional electrical stimulation (FES) on freezing of gait (FOG) in patients with Parkinson’s disease”, Clinical neurophysiology (supplement), *JSSN*: 1388-2457, Elsevier, volume 124, issue 7, Page e11 DOI: 10.1016/j.clinph.2012.12.019. (M34)
  - [13] **Djurić-Jovicic M. D.**, Jovicic N. S., Radovanovic S. M., Stankovic I. D., Popovic M. B., Kostic V. S. “Recognition and classification of freezing of gait episodes in Parkinson's disease patients: Expert system based on inertial sensors”. In MOVEMENT DISORDERS (Vol. 29, pp. S278-S279). 111 RIVER ST, HOBOKEN 07030-5774, NJ USA: WILEY-BLACKWELL. (M34)

#### *National conferences:*

- [1] \*Djordjević, A.R., Niccolai, L., Olćan, D.I., **Djurić, M.D.**, “Miniature GPS antenna with ring resonator”, Proceedings of XII Telfor, 2004, Belgrade, Serbia.
- [2] Jovičić N., **Djurić M.**, Popović D.: “Portable Data Acquisition System for Gait Analysis Based on Bluetooth Communication”, Proceedings from the 15th Telecommunication forum, TELFOR 2007, Belgrade, Serbia, pp. 484-487 (M63).
- [3] **Djurić M.D.**, Došen S., Popović M.B., Popović D.B., “Sensors for Control of Assistive System for Restoring of the Walking”, 52nd Conference for Electronics, Telecommunications, Computers, Automation, and Nuclear Engineering, ETRAN 2008, ME1.1, June 9-12, 2008, Palić, Serbia, <http://etran.etf.rs/etran2008/sekcije.htm> (M63).
- [4] **Djurić-Jovičić M.**, Milovanović I., Jovičić N., Radovanović S., “Gait analysis: BUDA vs. GAITRITE”, Proceedings from the 53rd Conference for Electronics, Telecommunications, Computers, Automation, and Nuclear Engineering, ETRAN 2009, ME 2.2., June 15-18, 2009, Vrnjačka Banja, Serbia, <http://etran.etf.rs/etran2009/sekcije.htm> (M63).
- [5] Popović M., **Djurić-Jovičić M.**, Petrović I., Radovanović S., Kostić V., “Freezing of gait (FOG) in Parkinson’s disease patients : time analysis”, Book of Abstracts, 9th Congress of Clinical Neurophysiology with International Participation, October 15-17, 2009, Belgrade, Serbia. Naučna KMD, 2009. p. 108-109. Abstract published in Clinical Neurophysiology, Vol. 121, No. 4, 2010, p. e16, No. 48.
- [6] **Djurić-Jovičić M.**, Milovanović I., Janković M., Dragin A., “Synergies of a gait - Clinical measurements of kinematics and polymyography”, Book of Abstracts from Symposium of clinical neurophysiology with international participation, October 8-9, 2010, Belgrade, Serbia, pp. 49 (M63).

- [7] **Djurić-Jovičić M.**, Milovanović I., Popović D.B., “Statistical method for gait classification based on data recorded with inertial sensors”, Book of Abstracts from Symposium of clinical neurophysiology with international participation, November 4, 2010, Belgrade, Serbia, pp. 33 (M63).
- [8] **Djurić-Jovičić M.**, Radovanović S., Kostić V., Popović M., “Primena senzorskog sistema za klasifikaciju epizoda poremećaja obrasca hoda kod pacijenata obolelih od Parkinsonove bolesti”. IX/XV Kongres neurologa Srbije sa međunarodnim učešćem, i VI Kongres Društva za neuronauke Srbije sa međunarodnim učešćem, Beograd, Srbija, 14-16 Nov 2013, P50. (M63)
- [9] Pejčić N., Petrović V., Miljković N., **Djurić-Jovičić M.**, “Radno opterećenje terapeuta tokom stomatološkog rada”, I Kongres dečje i preventivne stomatologije, Zbornik sažetaka, 04-05 oktobar 2013, Beograd, Srbija, p.28. (M64)

#### **LANGUAGES:**

- English (fluent)
- Russian (good)
- Italian (good)
- Spanish (moderate)