

**Curriculum Vitae** 

Novak N. Nedic

# PERSONAL INFORMATION



# Novak N. Nedic

- Dositejeva 19, 36000 Kraljevo, Serbia
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- nedic.n@mfkv.kg.ac.rs

Sex Male | Date of birth 02/05/1953 | Nationality Serbian

# POSITION

Full professor, Head of Department for Automatic Control, Robotics and Fluid Technique, Faculty of Mechanical and Civil Engineering in Kraljevo, University of Kragujevac, Serbia.

## WORK EXPERIENCE

## **Teaching experience**

From 1979 up today he has been teaching in subjects: Automatic Control, Robotics and Fluid Power Control at Basic, Master and Doctoral study at University of Kragujevac and other universities, part-time, in Belgrade, Sarajevo and Pristina.

### **Research experience**

- He was the mentor of three doctoral dissertations and eight mr thesis. He conducted with more than 80 graduate students.
- He has published four books.
- Prof. N. Nedic has managed at the Faculty with six international projects and twelve national projects.
- He has published over 100 scientific papers in journals and conferences.

## EDUCATION AND TRAINING

- 1987. Doctoral thesis: "Synthesis of hydraulic servomechanisms with the computer control for the precise obtainment of the trajectories of industrial robots" Department for Automatic Control, Faculty of Mechanical Engineering, Belgrade.
- 1980. Mr thesis: "Sensibility, controllability and observability of hydraulic components and automatic control systems", Department for Automatic Control, Faculty of Mechanical Engineering, Belgrade.
- 1977. Diploma thesis: "Synthesis of mechanisms", Department for Automatic Control, Faculty of Mechanical Engineering, Belgrade.



## PERSONAL SKILLS

Mother tongue(s)	Serbian				
Other language(s)	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C1	C1	C1	C1	C1
Russian	C1	C1	C1	C1	C1
Organisational /managerial skills	Levels: A1/2: Basic user - B1/2: Independent user - C1/2 Proficient user Common European Framework of Reference for Languages He has been Dean of Faculty of Mechanical and Civil Engineering in Kraljevo,				
	from 1998 to 2000, and from 2006 to 2012.				
Computer skills	Windows, Office.				
Driving licence	■ B.				
ADDITIONAL INFORM/		ssion work:			
1985. 1987. 2005. 2009. 1999. and 2012.	<ul> <li>Awards for profession work:</li> <li>Clemson University, Clemson, USA, Diploma for successfully done research in period (19821985.).</li> <li>Diploma by Serbian Association for systems for automatic control and measurement (SAUM).</li> <li>First Charter of Systems, Automatic Control and Measurements.</li> <li>First Charter of Union of Engineers and Technicians of Serbia.</li> <li>Diploma by "Student organisation" of Faculty of Mechanical Engineering, Kraljevo.</li> <li>Professional stay and specialisation abroad (Russia, UK, USA, Germany, etc.).</li> <li>Member of the editorial board of the journal FME Transactions from 2008 to today. He managed several international conferences (Systems, Automatic Control and Measurements-SAUM, Heavy Machinery-HM). He had invited lectures at the University of Bologna. Joined in the lexicon of "WHO IS WHO IN SERBIA" (1991, 1995).</li> </ul>				
ANNEXES	Hobby: sport and	social services			

## Head of projects of international importance at the Faculty

- 1. N.N. Nedić (2012.-2015.), "ADRIA HUB", EU Project (project coordinator for FMG).
- 2. N.N. Nedić (2011.-2012.), "ATC", EU Project (project coordinator for MFKV).
- 3. N.N. Nedić (2011.-2012.), "IMPuls", EU Project (senior manager).
- 4. N.N. Nedić (2010.-2012.), "TRANSBONUS", FP7 (project coordinator for Serbia).
- 5. N.N. Nedić (2008.-2011.), "SERVICE", FP7 (leader manager).
- N.N. Nedić (1991.-1993.), TEMPUS JOINT EUROPEAN PROJECT GRANT. No JEP 2205 91 /I (project coordinator for MFKV).



## Books:

- 1. V. Filipovic, **N.Nedic** (2008), "PID Controllers", University of Kragujevac, Faculty of Mechanical Engineering in Kraljevo, 257 p. (in Serbian).
- 2. **N.Nedic** (2003), "Analysis and synthesis of electrohydraulic and electropneumatic servo components and servosystems of high accuracy and repeatability", Faculty of Mechanical Engineering in Kraljevo, 102 p. (in Serbian).
- 3. **N.Nedic** (1997), Practicum for laboratory exercises for fundamentals of automatic control and automatic control systems, Faculty of Mechanical Engineering in Kraljevo, 142 p. (in Serbian).
- 4. N.Nedic, et al. (1985), Pneumatics, Faculty of Mechanical Engineering and YCAYM, Belgrade, 473 p. (in Serbian).

### Papers published in leading journals of international importance (SCI):

- 1. **Nedic, N.,** Stojanovic, V., Djordjevic, V. (2015), Optimal control of hydraulically driven parallel robot platform based on firefly algorithm, Nonlinear Dynamics, DOI 10.1007/s11071-015-2252-5, ISSN: 0924-090X, Article in Press.
- Stojanovic, V., Nedic, N. (2015), Robust Kalman filtering for nonlinear multivariable stochastic systems in the presence of non-Gaussian noise, International Journal of Robust and Nonlinear Control, DOI: 10.1002/rnc.3319, ISSN: 1049-8923, Article in Press.
- 3. Stojanovic, V., **Nedic, N.** (2015), A Nature Inspired Parameter Tuning Approach to Cascade Control for Hydraulically Driven Parallel Robot Platform, Journal of Optimization Theory and Applications, DOI: 10.1007/s10957-015-0706-z, ISSN:0022-3239, Article in Press.
- 4. **Novak Nedić**, Dragan Pršić, Ljubiša Dubonjić, Vladimir Stojanović, Vladimir Djordjević (2014), "Optimal cascade hydraulic control for a parallel robot platform by PSO", International Journal of Advanced Manufacturing Technology, Volume 72, Issue 5-8, pp.1085-1098, ISSN: 0268-3768.
- 5. Ljubiša Dubonjić, **Novak Nedić**, Vojislav Filipović, and Dragan Pršić (2013), "Design of PI controllers for hydraulic control systems" Mathematical Problems in Engineering Vol. 2013, pp.1-14, ISSN: 1024-123x.
- 6. Lj. Lukić, M. Đapić, D.Polajner, **N.Nedić** (2013), "Modeling the Know-how in Metal Cutting Techologies for Multi-Agent CAPP in Inteligent Manufacturing Systems", Metalurgia International, Vol.18(3), ISSN 1582-2214.
- 7. Milicevic, I., Slavkovic, R., Golubovic, D., **Nedic, N.**, Radonjic, S. (2012) "Applications of pc for identification and simulation of kinematics and dynamics in process of design and analysis of industrial robots" Technics Technologies Education Management, Vol.7 (3), pp. 1201-1211 ISSN: 1840-1503.
- 8. V. Filipović, **N.Nedić**, V.Stojanovic (2011), "Robust identification of pneumatic servo actuators in the real situations" Forschung Ingenieurwesen, Vol.75, No.4 pp. 183–196, ISSN: 0015-7899.
- 9. **N.Nedić**, LJ. Dubonjić, V. Filipović (2011), "Design of constant gain controllers for the hydraulic control system with a long transmission line" Forschung Ingenieurwesen, Vol.75, No.4 pp. 231–242, ISSN: 0015-7899.
- 10. DJ. Dihovicni, **N. Nedić** (2008), "Simulation, animation and program support for a high performance pneumatic force actuator system", Mathematical and Computer Modeling, Vol.48,(5-6), pp.761-768, ISSN 0895-7177.

### Papers published in journals of international importance:

- 1. V. Stojanovic, **N. Nedic** (2015): Model Order Selection Based on Robust Akaike's Criterion, International Journal of Mechanical Engineering and Automation, 2(4), pp.159-165, ISSN: 2333-9187.
- 2. Dragan Pršić, **Novak Nedić**, Ljubiša Dubonjić, (2013), "Modeling and Simulation of Hydraulic Long Transmission Line by Bond Graph" Journal of Mechanics Engineering and Automation, Vol. 3 (4), pp.257-262, ISSN: 2159-5275.
- 3. Pršić Dragan, **Nedić Novak**, Dubonjić Ljubiša, Đorđević Vladimir (2012), "Bond Graph Modeling In Simscape" International Journal of Mathematics and Computers in Simulation, Vol. 6, Issue 2, pp. 239-247. ISSN: 1998-0159.
- 4. DJ.N.Dihovicni, **N.N. Nedić** (2007), "Practical Stability of Linear Systems With Delays in State" A.M.S.E. Journals, Association for the Advancement of Modelling & Simulation Techniques in Enterprises, Lyon, France.
- 5. DJ.N.Dihovicni, **N.N. Nedić** (2007), "Program Support for Distributed Control Systems on Finite Space Interval" International Journal of Intelligent Technology, Volume 2, Number 1, ISSN 1305-6417.