

Zoran D. Jeličić

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Personal Data

Date of Birth

- 13.02.1971.

Working experience:

2013 – Present Full Professor at the University of Novi Sad, Faculty of Technical Sciences,
Department of Computing and Control

2012-Present Head of Automation Control Group at the University of Novi Sad, Faculty of
Technical Sciences

2008-2013 Associate Professor at the University of Novi Sad, Faculty of Technical Sciences,
2008-2010 Director of Computing and Control Department, University of Novi Sad, Faculty
of Technical Sciences

2003-2008 Assistant Professor at the University of Novi Sad, Faculty of Technical Sciences,
1995-2003 Teaching assistant at the University of Novi Sad, Faculty of Technical Sciences

2001 Researcher at Technical University Berlin

Education:

University of Novi Sad, 1999 – 2003

PhD Thesis in Electrical Engineering and Computing: On Direct Methods of Calculus of Variations
in Optimization of Nonlinear Control Problems.

University of Novi Sad, 1995 – 1999

MSc Thesis in Electrical Engineering and Computing: On Gauge Extended and Direct Methods in
Continual Optimal Control Problems.

University of Novi Sad, 1990 – 1995.

BSc in Electrical Engineering and Computing

Teaching on University of Novi Sad**COMPUTING AND CONTROL***Undergraduate courses*

- | | | |
|---|-------------------------|--------------|
| 1 | Methods of Optimization | V semester |
| 2 | Digital Control Systems | VII semester |

Master courses

- | | | |
|---|-------------------------------|------------|
| 3 | Adaptive and advanced control | I semester |
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PhD courses

- | | |
|---|--------------------------------------|
| 4 | Selected topics in optimization |
| 5 | Selected topics in nonlinear control |

MECHATRONICS*Undergraduate courses*

- | | | |
|---|-------------------------|--------------|
| 6 | Methods of Optimization | VII semester |
|---|-------------------------|--------------|

SOFTWARE ENGINEERING AND INFORMATION TECHNOLOGIES*Undergraduate courses*

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|---|---|--------------|
| 7 | Nonlinear programming and evolutionary algorithms | III semester |
|---|---|--------------|

Teaching on SRH University Heidelberg, Germany**Master course**

- | | | |
|---|------------------------------|-------------|
| 1 | Advanced Control Engineering | II semester |
|---|------------------------------|-------------|

Publications

Textbook and one electronic textbook in the topic of control (both in Serbian language):

Supervision

Undergraduate	39 Undergraduate Honors Project Supervision
Graduate	38 Master of Science Thesis Supervision
	5 PhD Thesis Supervision

Research Projects:

Selected National Projects

1. Industry Automation, Energy Efficiency National Project: NPEE-101, 2002 - 2005.
2. Information and control system of water supply systems of major settlements, National Program of Planning, Protection and use of water in Serbia, National Project No: NPV-19B, 2004 - 2007.
3. Integrated management of energy flows in the NIS OIL Refinery Novi Sad, Energy Efficiency, National Project No: NPEE232-019, 2005 – 2008, Project coordinator: Dr Zoran Jeličić
4. Intelligent Supervising and Control System for Early Fault Detection and Isolation in Process Industry, National Project No: TR32018 2011 – present, Project coordinator: Dr Zoran Jeličić
5. Intelligent SCADS System for Energy Efficient Buildings, National Project, No TR 33013 2011-Present

More than 30 projects for Industry.

Selected International Projects

1. Alexandar von Humboldt project: Technische Universität Berlin , Effects of winglets on lift and drag, 2001.
2. Alexandar von Humboldt project: Technische Universität Berlin, Phase Diagrams and Interfacial Energies, 2003.-2004.
3. FP7, "Complex Power plants ROBustification by fault Diagnosis, Isolation and Advanced Control Techniques", 2008-2011.
4. FP 7, Cost-effective energy savings in healthcare buildings – Hospilot, 2009-2012.
5. Center of Excellence for Advanced and Intelligent Control. IPA *Cross-border collaboration project between Serbia and Hungary*, 2013-2014. Project coordinator: Dr Zoran Jeličić
6. COST Projekt CA15225.2016 – ongoing. Participates as MC member.

Publications:

Selected Journal Publications

1. **Jeličić, Z. D.** Atanacković, T. M, On an optimization problem for elastic rods, STRUCTURAL AND MULTIDISCIPLINARY OPTIMIZATION, (2006) vol.32 No.1 pp. 59-64.
2. **Z. D. Jeličić**, T. M. Atanacković, Optimal shape of a vertical rotating column, International Journal of Non-Linear Mechanics, 42, (2007), 172 –179.
3. Z.D. Jeličić, N. Petrovački: A Solution Scheme for Fractional Optimal Control Problems, Structural and Multidisciplinary Optimization, Springer, Volume 38, 571-581, Berlin, 2009

4. Alessandro Pisano, Milan R. Rapaić, **Zoran D. Jeličić**, Elio Usai (2010) Sliding mode control approaches to robust regulation of linear multivariable fractional-order dynamics. *International Journal of Robust and Nonlinear Control*, Volume 20, Issue 18, pages 2045–2056.
5. Milan R. Rapaić, **Zoran D. Jeličić** (2010) Optimal control of a class of heat diffusion systems. *Nonlinear Dynamics*, Vol 62, Number 1-2, 39-51
6. Željko Kanović, Milan R. Rapaić, **Zoran Jeličić** (2011) Generalized Particle Swarm Optimization Algorithm - Theoretical and Empirical Analysis with Application in Fault Detection. *Applied Mathematics and Computation* 217(24) 10175–10186 2011.
7. Milena Petković, Milan R. Rapaić, **Zoran D. Jeličić**, Alessandro Pisano (2012) On-line adaptive clustering for process monitoring and fault detection. *Expert Systems with Applications*, 39(11) September 2012 10226-10235.
8. Jakovljević B., Rapaić M., Jeličić Z.D., Šekara T.: On the distributed order PID controller, *AEU International Journal of Electronics and Communications - Archiv fuer Elektronik und Uebertragungstechnik*, 2017, Vol. 79, pp. 94-101, ISSN 1434-8411.
9. Mirna N. Kapetina, Milan R. Rapaić, **Zoran D. Jeličić** „Two-Stage Adaptive Estimation of Irrational Linear Systems“, *AEUE -International Journal of Electronics and Communications* (2017), Volume 78, 2017, Pages 213-219, ISSN 1434-8411
10. Mirna N. Kapetina, Milan R. Rapaić, Alessandro Pisano, **Zoran D. Jeličić** (2019) "Adaptive Parameter Estimation in LTI Systems," in *IEEE Transactions on Automatic Control*. In press: doi: 10.1109/TAC.2019.2893973, 2019

For more Journal and conference papers please consult

<https://scholar.google.com/citations?user=s9hsaH4AAAAJ&hl=en>