

## PERSONAL INFORMATION



## Dejan Jokić

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**Sex** Male | **Date of birth** 25/05/1980 | **Nationality** Serbian/Bosnia and Herzegovina

## WORK EXPERIENCE

September 2020 – Present

**Associate professor at the faculty**

International Burch University, Faculty of Engineering and Natural Science, Department of Electrical and Electronics Engineering

June 2020 – August 2024

**Head of Electrical and Electronic Engineering Department**

September 2021 - Present

**Part time – Associate professor at the faculty**

University of Donja Gorica (Montenegro), Faculty of Applied Science, Department of Electrical Engineering

October 2022 – October 2024

**Visiting professor – Course: Hardware for AI**

Catholic University Lille, Junia Ingénieurs (France)

February 2017 – August 2020

**Assistant professor at the faculty**

International Burch University, Faculty of Engineering and Natural Science, Department of Electrical and Electronics Engineering

Francuske revolucije, Iličići, Sarajevo, 71 210, Bosnia and Herzegovina

- Performing lectures at the Department of Electrical and Electronics Engineering and Department of Information Technologies with undergraduate and postgraduate students
- Participating on scientific projects and projects for economy

**Business or sector** Educational and scientific institution

March 2013 – February 2017

**Senior teaching assistant at the faculty**

University of East Sarajevo, Faculty of Electrical Engineering

30, Vuka Karadžića, East Sarajevo, 71 123, Bosnia and Herzegovina

- Performing auditory and laboratory exercises at the Faculty of Electrical Engineering with undergraduate and postgraduate students
- Participating on scientific projects and projects for economy

**Business or sector** Educational and scientific institution

May 2007 – March 2013

**Consultant/Head of Laboratory complex**

University of East Sarajevo, Faculty of Electrical Engineering

30, Vuka Karadžića, East Sarajevo, 71 123, Bosnia and Herzegovina

- Performing auditory and laboratory exercises at the Faculty of Electrical Engineering with undergraduate students
- Participating on scientific projects and projects for economy

**Business or sector** Educational and scientific institution

## EDUCATION AND TRAINING

2013 – 2016 **PhD - Electrical Engineering – Mechatronics**  
University of East Sarajevo, Faculty of Electrical Engineering, East Sarajevo, Bosnia and Herzegovina  
30, Vuka Karadzica, East Sarajevo, 71 123, Bosnia and Herzegovina

**PhD thesis title: “Realization of control environment for robot PUMA 560”**

2008 – 2012 **Master of Science in Electrical Engineering - Automation and Electronics**  
University of East Sarajevo, Faculty of Electrical Engineering, East Sarajevo, Bosnia and Herzegovina  
30, Vuka Karadzica, East Sarajevo, 71 123, Bosnia and Herzegovina

**Master's thesis title: “Realization of control environment in Matlab/Simulink for FPGA”**

1999 – 2007 **Bachelor of Science in Electrical Engineering - Automation and Electronics**  
University of East Sarajevo, Faculty of Electrical Engineering, East Sarajevo, Bosnia and Herzegovina  
30, Vuka Karadzica, East Sarajevo, 71 123, Bosnia and Herzegovina

## PERSONAL SKILLS

Mother tongue(s) Serbian/Croatian/Bosnian

Other language(s)	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	B2	B2	B2	B2	B2

Levels: A1/2: Basic user - B1/2: Independent user - C1/2 Proficient user  
Common European Framework of Reference for Languages

- Communication skills
- Team work: working in research teams on several scientific projects
  - Teaching and pedagogical skills: working and teaching at the faculty with students at different studying years.
- Computer skills
- Proficient with Microsoft Office programmes (Word, Visio, PowerPoint)
  - Proficient with Matlab/Simulink/DSP Builder software
  - Proficient with Altium Designer software
  - Proficient with Quartus/VHDL software
- Other skills
- Passion for skiing, biking and outdoor activities.
  - Love to travel and experience different cultures.

## ADDITIONAL INFORMATION

## Research interests

- FPGA based design, Embedded computing, Control systems based on FPGA, Renewable power sources, Photovoltaic power supply systems.

## Selected publications

- Rijad Sarić, Junchao Chen, Miloš Krstić, Edhem Čustović, Goran Panić, Jasmin Kevrić, Dejan Jokić, "Classification of Space Particle Events using Supervised Machine Learning Algorithms, 2021 IEEE 8th International Conference on Data Science and Advanced Analytics (DSAA)
- Rijad Saric, Jasmin Kevric, Naida Hadziabdic, Ahmed Osmanovic, Mirsad Kadic, Muzafer Saracevic, Dejan Jokic, Vladimir Rajs, "Dental age assessment based on CBCT images using machine learning algorithms", Forensic Science International, 2022.
- Hala Shaari, Jasmin Kevrić, Samed Jukić, Larisa Bešić, Dejan Jokić, Nuredin Ahmed, Vladimir Rajs, "Deep Learning-Based Studies on Pediatric Brain Tumors Imaging: Narrative Review of Techniques and Challenges", Brain Sciences, 2021.
- D Jokić, S Lubura, M Ristović, S Stankovski, V Rajs, H Šiljak, "What's in the Box: Design of an Open Didactic Robot Environment, Electronics 9 (12), 2090
- R Sarić, D Jokić, N Beganović, LG Pokvić, A Badnjević FPGA-based real-time epileptic seizure classification using Artificial Neural Network, Biomedical Signal Processing and Control 62, 102106
- D Jokić, S Lubura, V Rajs, M Bodić, H Šiljak, "Two Open Solutions for Industrial Robot Control: The Case of PUMA 560" Electronics 9 (6), 972
- Mehmed Dug, Stefan Weidling, Egor Sogomonyan, Dejan Jokic and Milos Krstic, "Full Error Detection and Correction Method Applied on Pipelined Structure Using Two Approaches" Journal of Circuits, Systems and Computers, <https://doi.org/10.1142/S0218126620502187>
- R Sarić, J Kevrić, E Čustović, D Jokić, N Beganović, "Evaluation of Skeletal Gender and Maturity for Hand Radiographs using Deep Convolutional Neural Networks", CODIT, Paris 2019.
- D. Jokić, S. Lubura, S. Stankovski, "Development of Integral Environment in Matlab/Simulink for FPGA", Advances in Electrical and Electronic Engineering Journal, Vol. 12, No. 5, pp. 459 - 468, ISSN 1336-1376 (Print) 1804-3119 (Online), DOI DOI: 10.15598/aeee.v12i5.1112, 2014
- Aleksej Jurenoks, Dejan Jokic, "Sensor Network Information Flow Control Method with Static Coordinator within Internet of Things in Smart House Environment", Procedia Computer Science, Dec 2017, DOI 10.106/j.procs.2017.01.150
- Aleksej Jurenoks, Dejan Jokic, "Coordinator Role Mobility Method for Increasing the Life Expectancy of Wireless Sensor Networks, Applied Computer Systems, 2017, DOI: 10.1515/acss-2017-0006
- N. Beganovic, J. Kevric, D. Jokic, „Identification of Diagnostic-related Features Applicable to EEG Signal Analysis“, PHM Society Conference, Vol 10 No 1 (2018): Proceedings of the Annual Conference of the PHM Society.
- Slobodan Lubura, Dejan Jokić, Goran Đorđević, "Radial Basis Gaussians Functions for Modelling Motor Learning Process of Human's Arm Movement in the Ballistic Task – Hit a Target", MRES 2018, Jahorina, Springer
- S. Zaimović, H. Šiljak, D. Jokić, „Artificial Colloquist: Treating Social Anxiety Disorder Using Altera FPGA“, PDES 2018, <https://doi.org/10.1016/j.ifacol.2018.07.176>
- M. Dug, M. Krstic, D. Jokic, „Implementation and Analysis of Methods for Error Detection and Correction on FPGA“ PDES 2018, <https://doi.org/10.1016/j.ifacol.2018.07.178>
- Dejan Jokić, Slobodan Lubura, „Identification of Parameters for Robot PUMA 560“, International Symposium on Innovative and Interdisciplinary Applications of Advanced Technologies, Springer, [https://doi.org/10.1007/978-3-319-71321-2\\_74](https://doi.org/10.1007/978-3-319-71321-2_74)
- D. Jokić, S. Lubura, "Comparative Analysis of the Controllers for Puma 560 Robot", Programmable Devices and Embedded Systems", PDeS 2016, DOI.org/10.1016/j.ifacol.2016.12.017
- D. Jokić, S. Lubura, S. Stankovski, "Universal block for simple design of FPGA based controller in anthropomorphous robot configuration ", Programmable Devices and Embedded Systems PDeS 2015, DOI 10.1016/j.ifacol.2015.07.021, 2015
- D. Jokić, S. Lubura, S. Stankovski, "Innovative approach to programming of robot PUMA 560", Proceedings /XVI International Scientific Conference on INDUSTRIAL SYSTEMS – IS '14, Vol. I, No. 1, pp. 95-100, ISBN ISBN 978-86-7892-652-5, DOI COBISS.SR ID 291738631, 2014
- D. Jokić, S. Lubura, S. Stankovski, "Development of a New Controller with FPGA for PUMA 560 Robot", 12th IFAC Conference on Programmable Devices and Embedded Systems (2013), Vol. 12, pp. 161-166, ISSN 1474-6670, ISBN 978-3-902823-53-3, DOI 10.3182/20130925-3-CZ-3023.00069, 2013
- D. Jokić, S. Lubura, D. Lukač, "Development of Integral Environment in Matlab/Simulink for FPGA", 12th IFAC Conference on Programmable Devices and Embedded Systems (2013), pp. 50-55, ISSN 1474-6670, ISBN 978-3-902823-53-3, DOI 10.3182/20130925-3-CZ-3023.00003, 2013
- D. Jokić, S. Lubura, M. Šoja, "Closed Control Loop Implementation for Single Robot Axis on FPGA Platform", 11th IFAC/IEEE International Conference on Programmable Devices and Embedded Systems, PdeS2012, Vol. 11, No. 1, pp. 174-179, ISSN 1474-6670, DOI 10.3182/20120523-3-CZ-3015.00035, 2012
- D. Jokić, S. Lubura, S. Lale, D. Lukač, "Encoder signal processing on FPGA platform realized in Matlab/DSP Builder", 20th Telecommunications Forum (TELFOR), Vol. 1, No. 1, pp. 1044 - 1047, ISBN 978-1-4673-2983-5, DOI 10.1109/TELFOR.2012.6419389, 2012
- M. Ristović, S. Lubura, D. Jokić, "Implementation of Cordic Algorithm on FPGA Altera Cyclone", 20th Telecommunications Forum (TELFOR), Vol. 1, No. 1, pp. 875 - 878, ISBN 978-1-4673-2983-5, DOI10.1109/TELFOR.2012.6419347, 2012.

**Projects**

- GeoNetSee, An AI/IoT-based system of GEOSensor NETworks for real-time monitoring of unStaBLE tErrain and artificial structures, Danube Interreg, 1.1. 2024 – present,
- **Smart4All, Horizon 2020**, Capacity building for development software for detecting COVID-19 from X ray images (COVID XRD)
- Deutsche Forschungsgemeinschaft project: “**Application of Artificial Intelligence in Radio Communication Systems**”, 1.9.2019. – 1.9.2020, GZ:PA 3633/1-1
- **Electrical energy markets and engineering education – ELEMEND**, Erasmus+ Capacity Building In Higher Education Project, Project No: 585681-EEP-1-2017-EL-EPPKA2-CBHE-JP, 2017.
- **ERASMUS + Key action 1, Technical University Riga, 2017, Donao University Krems, 2018 TEISTE Greece 2017., 2022 University of Split, 2025 Techological University Dublin**,
- **TEMPUS Project „Studies in Bioengineering and Medical Informatics (BioEMIS)“**, University of East Sarajevo, 01.01.2013 - 01.01.2015.
- **Development of power electronics devices for increasing efficiency of PV systems in construction**, Faculty of Electrical Engineering, University of East Sarajevo, project of Ministry of Science and Technology, Government of the Republic of Srpska, Bosnia and Herzegovina, 2014.
- **Realization of MPPT algorithms and optimal power electronics converter as parts of photovoltaic supply system**, Faculty of Electrical Engineering, University of East Sarajevo, project of Ministry of Science and Technology, Government of the Republic of Srpska, Bosnia and Herzegovina, 2013.
- **DAAD Project “DOCS-Design of complex systems” programme “Academic rebuilding of South-eastern Europe”**, project leader Prof. Dr Volker Zerbe (University of Applied Science Erfurt, Germany), Faculty of Electrical Engineering, University of East Sarajevo, 2013.
- **DAAD Project “Erfurt, Sofia, Skopje, Nis, Banjaluka, and Sarajevo” programme “Academic rebuilding of South-eastern Europe”**, project leader Prof. Dr Volker Zerbe (University of Applied Science Erfurt, Germany), Faculty of Electrical Engineering, University of East Sarajevo, 2012.
- **DAAD programme “Academic rebuilding of South-eastern Europe”**, project funded by The German Government, 2010. Project included professional practice at the Institute IHP - Innovations for High Performance Microelectronics Frankfurt (Oder), Germany.
- **DAAD Project „Embedded System Design“**, programme “Academic rebuilding of South-eastern Europe” (IHP GmbH Frankfurt Oder, BTU Cottbus, Prof. Dr.-Ing. Rolf Kraemer, Dr. Miloš Krstić), Elektrotehnički fakultet Univerziteta u Istočnom Sarajevu, 20.01.2009. -20.01.2010.
- **Modelling of components in hybrid power supply systems**, Faculty of Electrical Engineering, University of East Sarajevo, project of Ministry of Science and Technology, Government of the Republic of Srpska, Bosnia and Herzegovina, 2009.

**Tech projects**

- D. Jokić, S. Lubura, „**Realization of new FPGA based controller for robot PUMA 560**”, Faculty of Electrical Engineering, University of East Sarajevo, project of Ministry of Science and Technology, Government of the Republic of Srpska, Bosnia and Herzegovina, 19/6-030/3-2-3-1/13, 12.12.2013.
- D. Jokić, „**Increasing energy efficiency for fireplace-based heating**”, project of Ministry of Science and Technology, Government of the Republic of Srpska, Bosnia and Herzegovina, 19/6-030/3-1-13-1/14”, 2014.
- A. Lemez, M. Šoja, S. Lubura, D. Jokić, „**Device for improving low voltage grid resistance on voltage drops**”, Company K-INEL East Sarajevo, company ENERGOGROUP East Sarajevo, in use in following companies: Public Electric Utility “Elektroprivreda” of Republic of Srpska, Public Electric Utility “Elektroprivreda” of Republic of Serbia, Public Electric Utility “Elektroprivreda” of Republic of Croatia, 2009.
- M. Šoja, S. Lubura, D. Jokić, „**Uninterrupted Power Supply for servers SBNS**”, Company "K-INEL East Sarajevo, developed for company "NFTEL, Pale", 2009.
- M. Šoja, S. Lubura, D. Jokić, „**System for Uninterrupted Power Supply for pumps for heating systems**”, Company "K-INEL East Sarajevo, 2009.
- S. Lubura, M. Šoja, D. Jokić, „**Uninterrupted Power Supply for DC system for wireless antennas**”, Company "K-INEL East Sarajevo", developed for company "NFTEL Pale", 2008.

- Honours and awards**
- Programmable Devices and Embedded systems IFAC/IEEE PDES conference 2018 – The best poster, Ostrava, R. Czech.
  - Certificate of Appreciation – International Burch University 2017.
  - IEEE coin, IEEE President and CEO Barry L. Shoop, Ph.D., P.E. 2016
  - Hardware and Software competition 2007 – Third place, University of Novi Sad, Faculty of Technical Science, Serbia.
- Other Activities**
- Vice Chair, IEEE Bosnia and Herzegovina section
  - Treasurer IEEE Bosnia and Herzegovina section
  - Co-chair of the International Program Committee of the conference 17<sup>th</sup> IFAC Programmable Devices and Embedded Systems 2021
  - Chair of Young Professionals IEEE AG Bosnia and Herzegovina, 2018 – 2020.
  - Member of the International Program Committee of the conference IFAC/IEEE Programmable Devices and Embedded Systems, 2016 - present
  - Member of the International Program Committee of the International Symposium on Innovative and Interdisciplinary Applications of Advanced Technologies – IAT 2019.
  - Mentor of Master thesis – “Application of full error detection and correction method on a pipelined integer divider”, candidate Mehmed Djug 2018
  - Mentor of Start Up Team – Smart Bag, IEEE Students and Young Professional congress 2017
  - Mentor of Start Up Team – CleanAir, IEEE Students and Young Professional congress 2017
  - Chair of IEEE Students and Young Professional congress 2017, International Burch University
  - Mentor of Start Up Team – Agroadvice, IEEE Students and Young Professional congress 2016
  - Chair of Summer School – Modern Mechatronics Systems, University of East Sarajevo, 2016.
  - Chair of Summer School – Modern Mechatronics Systems, University of East Sarajevo, 2015.
  - Chair of Summer School – Modern Mechatronics Systems, University of East Sarajevo, 2014.
  - Chair of Summer School – Modern Mechatronics Systems, University of East Sarajevo, 2013.