Obarčanin

Kerim



Contact

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Languages

English – C2 Spanish – B1

Research focus

- Signal processing
- Data acquisition
- Machine learning
- Deep learning
- Feature extraction
- High Voltage Circuit Breakers

Summary

Expert in the field of instrumentation, measurement, data acquisition and signal processing field. Engaged in the industrial and academic research in the field of high voltage test equipment for condition assessment specialized in the high voltage circuit breaker niche.

Experience

Industry Expert Lecturer – 02/2023 to present International University Sarajevo

• ENS211 Signals and Systems

Industry Expert Lecturer – 03/2015 to present Sarajevo School of Science and Technology, Sarajevo, BiH

- EE440 Multimedia Electronics
- EE410 Digital Signal Processing
- EE450 Selected Topics in Electrical Engineering

Technical Director – 08/2019 to present DV Power, Stockholm, Sweden

Manager of Software Engineering Department – 02/2012 to 08/2019 DV Power, Stockholm, Sweden

Software Engineer – 04/2010 to 02/2012 DV Power, Stockholm, Sweden

Maintenance engineer – 09/2009 to 11/2009 New Technology, Sarajevo, BiH

Education

- PhD Degree: Automatic control and electronics 2016 to present
 PhD candidate
 University of Sarajevo, Faculty of Electrical Engineering,
 - (Bosnia and Herzegovina)
- Magister Degree: Automatic control and electronics 2010 to 2015

4 semesters

University of Sarajevo, Faculty of Electrical Engineering, (Bosnia and Herzegovina)

 Engineer Degree: Automatic control and electronics – 2004 to 2010
9 semesters
University of Sarajevo, Faculty of Electrical Engineering, (Bosnia and Herzegovina)

Publications

- **K.Obarcanin**, F.Ramovic, "A Method for Condition Assessment of the High Voltage Disconnector Switch Electric Motor Drive", MoSICom 2023, Dubai, UAE
- K.Obarcanin, R.Ostojic, "High Voltage Circuit Breakers Arcing Contacts Operational Condition Indices Extracted from the Dynamic Resistance and Contact Motion Trajectory", MoSICom 2023, Dubai, UAE
- **K.Obarcanin**, Dz.Skulj, B.Lacevic, "Condition Assessment of Power Circuit Breakers Bases on Machine Learning Algorithms", IEEE Transaction on Power Delivery, 2023.
- K. Obarcanin, B.Lacevic, "Feature importance analysis for power circuit breaker vibration-based condition assessment", 29th International conference on Information, Communication and Automation Technologies ICAT2023, Sarajevo, Bosnia and Herzegovina
- R. Ostojic, A. Secic, B. Milovic, **K. Obarcanin**, "Improved Method for Safe Timing Measurement of GIS Circuit Breakers", NETA World Mag. Summer 2022, pp. 68-74, 2022.
- **K. Obarcanin**, Dz. Skulj, B. Lacevic, "High Voltage Circuit Breaker Vibration Signature Indices Evaluation for Condition Assessment", B&H Electrical Engineering 15 (Special Issue), 82-88, 2021
- K. Obarcanin, B. Lacevic, M. Ermidoro, "A High-Voltage Circuit Breaker Condition Assessment Method using the Vibration Fingerprint based on VMD-EM method", IEEE International Instrumentation and Measurement Technology Conference (I2MTC), Dubrovnik, Croatia, 2020
- **K. Obarcanin,** "A High Voltage Circuit Breaker Behavior Change Indices based on the Vibration Signature Analysis", 19th International Symposium Infoteh, Bosnia and Herzegovina, 2020.
- R. Ostojic, S. Vucicevic, B. Fazlic, K. Obarcanin, "Benefits and Opportunities of the Wireless Technology Utilization for High Voltage Circuit Breaker and Power Transformer Test Instruments", 19th International Symposium Infoteh-Jahorina, Bosnia and Herzegovina, 2020
- A. Secic, **K. Obarcanin**, "Improving safety in operation time measurement procedure for circuit breakers in gas insulated substation", Research Disclosure, 2019
- **K. Obarcanin**, A. Secic, "The Embedded Handheld System for Contact Timing Parameter Extraction in Online Mode for the High Voltage Circuit Breaker Condition Assessment", International Symposium on Industrial Electronics INDEL 2018, Banja Luka, Bosnia and Herzegovina
- E. Osmanbasic, **K. Obarcanin**, "Acceleration of LV winding resistance measurement", Transformer Magazine, Vol 5, Issue 3, July 2018.
- A. Secic, **K. Obarcanin**, "Power circuit breaker condition assessment based on vibration fingerprint measurement and why it can save your day", The International Electrical Testing Association Journal NETA World Magazine, summer 2017
- **K. Obarcanin**, S. Dzuzdanovic, R. Ostojic, "Parameters for Condition Assessment of the High Voltage Circuit Breakers Arcing Contacts using Dynamic Resistance Measurement", 40th International Convention MIPRO 2017, Opatija, Croatia
- **K. Obarcanin**, R. Ostojic, "Linear Motion Calculation of the High Voltage Circuit Breaker Contacts using Rotary Motion Measurement with Nonlinear Transfer Function", 39th International Convention MIPRO 2016, Opatija, Croatia

- K. Obarcanin, S. Dzuzdanovic, "The Software Solution for the Presentation and Analysis of the High Voltage Circuit Brekaer Timing Measurement Results", Infoteh 2016, Jahorina, Bosnia and Herzegovina
- K. Obarcanin, A. Secic, N. Hadzimejlic, "Design and Development of the Software Solution for Analysis and Acquisition of the High Voltage Circuit Breakers Dynamic Resistance Measurement Results", 38th International Convention MIPRO 2015, Opatija, Croatia
- **K. Obarčanin**, "Mathematical model and simulation of mechanical ventilator with remote control & acquisition feature using TCP/IP protocol", National Instruments, NI Days 2012, Zagreb
- J. Velagić, K. Obarčanin, E. Kapetanović, S. Huseinbegović, N. Osmić, "Design of PLC based PI Controller for the Permanent Magnet DC Motor under Real Constraints and Disturbances", ICAT 2009, Sarajevo

Peer Review

- IEEE International Conference on Modelling Simulation & Intelligent Computing (MoSICom 2023), Dubai, UAE
- IEEE Transactions on Instrumentation and Measurement (2019, 2022, 2023, 2024)
- ICAT 2017, ICAT 2023, Sarajevo, Bosnia and Herzegovina
- Africon 2023, Nairobi, Kenya
- IET Generation, Transmission & Distribution (2017)

Membership

- IEEE Senior Member (17 years) (Member No: 80702843)
- IEEE Instrumentation and Measurement Society (6 years)
- IEEE Sensors Council (6 years)