

16TH
DAYS OF
BHAAAS



Sarajevo
June 19-22, 2025



BHAAAS
Bosnian-Herzegovinian American
ACADEMY OF ARTS AND SCIENCES

TNS PROGRAM

16th Days of BHAAAS

SARAJEVO 2025

Symposia – conference registration and payment required for all participants.

Special Events – open access.



The Technical and Natural Sciences (TNS) division board:

Zlatan Akšamija, Chair

University of Utah, Department of Materials Science and Engineering, USA

Naida Ademović, Co-chair

University of Sarajevo - Faculty of Civil Engineering, Bosnia and Herzegovina

Aljo Mujčić, Member

University of Tuzla - Faculty of Electrical Engineering, Bosnia and Herzegovina

Seid Korić, Member

University of Illinois at Urbana-Champaign - Mechanical Science and Engineering, USA

Almir Karabegović, Member

University of Sarajevo - Faculty of Electrical Engineering, Bosnia and Herzegovina

18.06. Wednesday

Special event:

10:00 / 16:00

Workshop "Mathematics and Democracy"

Ismar Volić

Location:

Second Gymnasium - Sutjeska 1, Sarajevo

Special event:

18:30 / 19:30

Documentary "Counted Out";

screening for conference participants and invited guests

Ismar Volić

Location:

Cineplexx Sarajevo, Hotel Holiday - Zmaja od Bosne 4, Sarajevo

19.06. Thursday

Symposia:

| | | |
|---------------|---|------------|
| 08:30 / 12:30 | Computer Science and Information Technologies Students Symposium | Room DRINA |
| 10:30 / 15:30 | AI Across Disciplines: Transformative Applications in Various Fields | Room UNA |
| 13:30 / 16:15 | Mechanical Engineering | Room VRBAS |
| 13:30 / 15:30 | Advanced Electrical Power Systems | Room DRINA |

Location:

Hotel Holiday - Zmaja od Bosne 4, Sarajevo

Special event:

| | | |
|---------------|--|--------------|
| 09:00 / 12:00 | Workshop "Interdisciplinary Approaches to Flood Risk Assessment and Management" | |
| | Venera Simonović | |
| | Location: | |
| | Hotel Holiday - Zmaja od Bosne 4, Sarajevo..... | Room PICCOLO |

Special event:

| | | |
|---------------|---|--|
| 19:30 / 21:00 | "Blum", film | |
| | Jasmila Žbanić | |
| | Exclusive screening for conference participants | |
| | Location: | |
| | Meeting Point Cinema - Hamdije Kreševljakovića 13, Sarajevo | |

*Please collect your free tickets at the registration desk of 16th Days of BHAAAS at the Hotel Holiday during the day

20.06. Friday

Special event:

09:00 / 11:00 Panel Discussion **"AI and Robotics in Medicine: Innovation, Ethics and Safety"**

Location:

ASA Institute - ASA Hospital Džemala Bijedića 124, Sarajevo

Symposia:

09:15 / 12:00 **Civil Engineering**.....Room NERETVA

10:30 / 15:15 **Data Science and Geographic Information Systems**.....Room VRBAS

16:00 / 17:30 **Information and Communication Technologies**.....Room VRBAS

Location:

Hotel Holiday - Zmaja od Bosne 4, Sarajevo

Special event:

19:30 **Opening Ceremony of the 16th Days of BHAAAS, *invitation only**

Location:

Hotel Holiday - Zmaja od Bosne 4, Sarajevo

21.06. Saturday

Special event:

11:30 / 13:00

BiH Researcher's Meetup and 3MT Awards Ceremony;

with BH Futures Foundation.....Room PICCOLO

Location:

Hotel Holiday - Zmaja od Bosne 4, Sarajevo

20:00 / 23:00

Conference Dinner

Location:

"Small Museum BiH" - Aleja Ambasadora, Sarajevo

*after reservation and payment, please collect your tickets at the registration desk of the 16th Days of BHAAAS at Hotel Holiday during the conference



19.06. Thursday

AI ACROSS DISCIPLINES: TRANSFORMATIVE APPLICATIONS IN VARIOUS FIELDS

Dželila Mehanović (International Burch University, Sarajevo, Bosnia and Herzegovina)

Amela Vatreš Mudžet (International Burch University, Sarajevo, Bosnia and Herzegovina)

10:00 / 10:30 **Registration**

10:30 / 10:45 **Detection of Pneumonia Using VGG-16, MobileNetV2, and ResNet50
Convolutional Neural Networks**

Dženana Pačarić Ramaš

(University of Tuzla-Faculty of Electrical Engineering, Tuzla, Bosnia-Herzegovina)

Tatjana Konjić

(University of Tuzla-Faculty of Electrical Engineering, Tuzla, Bosnia-Herzegovina)

Azur Ramaš

(HTEC d.o.o. Sarajevo, Bosnia-Herzegovina)

Amira Šerifović Trbalić

(University of Tuzla-Faculty of Electrical Engineering, Tuzla, Bosnia-Herzegovina)

10:45 / 11:00

Multi-modal Contrastive Learning for Medical Image Classification and Clustering

Zinaid Kapić

(University of Rijeka-Faculty of Engineering, Croatia
University of Bihać-Faculty of Technical Engineering, Bosnia and Herzegovina)

Ivan Štajduhar

(University of Rijeka-Faculty of Engineering, Croatia)

11:00 / 11:15

Universal Genre Classification: Can Lyrics Alone Predict Music Genres Across Languages?

Ajla Beća

(International Burch University, Sarajevo, Bosnia and Herzegovina)

Selma Salman

(International Burch University, Sarajevo, Bosnia and Herzegovina)

Dželila Mehanović

(International Burch University, Sarajevo, Bosnia and Herzegovina)

Mirza Krupić

(International Burch University, Sarajevo, Bosnia and Herzegovina)

Amila Čaušević

(International Burch University, Sarajevo, Bosnia and Herzegovina)

11:15 / 11:30

Machine Learning Analysis of PM2.5 and NO2 Concentrations of Air Pollutants

Mirza Pašić

(University of Sarajevo – Faculty of Mechanical Engineering, Bosnia and Herzegovina)

Zedina Lavić

(University of Sarajevo – Faculty of Mechanical Engineering, Bosnia and Herzegovina)

Nada Sokolović

(High School of Transport and Communications, Sarajevo, Bosnia and Herzegovina)

Mugdim Pašić

(University of Sarajevo – Faculty of Mechanical Engineering, Bosnia and Herzegovina)

11:30 / 11:45

From Restricted Boltzmann Machines to Deep Belief Networks: A Multi-Dataset Performance Study

**Tarik Arnaut, Tarik Hubana, Jasmin Gerin, Adna Torlo, Šejla Špago,
Šejla Rahimić, Faris Rizvanović, Berina Šabanović**

(University "Džemal Bijedić" Mostar, Bosnia and Herzegovina)

11:45 / 12:00

Designing Smart IoT System for Optimized Urban Waste Collection in Sarajevo

Ejub Šabić

(International Burch University, Sarajevo, Bosnia and Herzegovina)

Elma Avdić

(International Burch University, Sarajevo, Bosnia and Herzegovina)

Amar Fazlić

(International Burch University, Sarajevo, Bosnia and Herzegovina)

Mirza Ponjavić

(International Burch University, Sarajevo, Bosnia and Herzegovina)

12:00 / 12:15 Optimizing neural network architectures for edge and IoT devices based on the efficient compute frontier for maximal computational efficiency

Faruk Herenda

(ARTI Analytics, Sarajevo, Bosnia and Herzegovina)

Tarik Hubana

(ARTI Analytics, Sarajevo, Bosnia and Herzegovina)

Migdat Hodžić

(ARTI Analytics, Sarajevo, Bosnia and Herzegovina)

12:15 / 12:30 Short Discussion - All participants

12:30 / 13:30 Lunch

13:30 / 13:45 Data to Decisions: ML-Driven Spectrum Management with Radar Signal Insights

Elma Avdić

(International Burch University, Sarajevo, Bosnia and Herzegovina)

Ajla Herenda

(International Burch University, Sarajevo, Bosnia and Herzegovina)

13:45 / 14:00 Exploratory Data Analysis of Sentiment Trends in Amazon Book Reviews Dataset

Emina Omerčević

(International Burch University, Sarajevo, Bosnia and Herzegovina)

Dželila Mehanović

(International Burch University, Sarajevo, Bosnia and Herzegovina)

Amila Čaušević

(International Burch University, Sarajevo, Bosnia and Herzegovina)

14:00 / 14:15 Impact of ECG Segmentation on Efficiency of Atrial Fibrillation Detection

Amina Tihak, Ajla Adilović, Edin Avdukić, Tarik Buljubašić, Adelisa Hasić, Ajla Herak, Nihad Hodžić, Naida Mehić, Andrea Nikolić, Mersad Šiljak, Dušanka Bošković, Adnan Mujezinović
(University of Sarajevo-Faculty of Electrical Engineering, Sarajevo, Bosnia and Herzegovina)

14:15 / 14:30 Comparing Sentiment Analysis Emotion Classification Models for Psychotherapy Use

Anja Šehovac

(International Burch University, Sarajevo, Bosnia and Herzegovina)

14:30 / 14:45

Super-Resolution in Medical Imaging: Evaluating SRCNN, EDSR, ESPCN, and SRGAN on Dermatological Images

Medina Kapo

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

Emir Buza

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

Amila Akagić

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

14:45 / 15:00

Library Information System with generative AI

Amina Kurtović, Almir Karabegović, Nordin Smajlović, Ilma Kurtović Turčalo, Nikolina Kokor, Matija Kokor

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

15:00 / 15:15

Short Discussion - All participants

15:15 / 15:30

Closing words

15:30 / 16:00

Coffee break

MECHANICAL ENGINEERING

Room VRBAS, 1st floor
Thursday, June 19, 2025

Seid Korić

(BHAAAS/National Center for Supercomputing Applications, University of Illinois at Urbana-Champaign, USA, and the Grainger College of Engineering, Mechanical Science and Engineering, University of Illinois at Urbana-Champaign, USA)

Muris Torlak

(University of Sarajevo-Faculty of Mechanical Engineering, Sarajevo, Bosnia and Herzegovina)

***The given times include both presentation and questions and answers**

12:30 / 13:30 Registration and Lunch

13:30 / 13:55 Sequential Deep Operator Neural Networks for Thermomechanical Modeling of Steel Solidification with Multi-Inputs

Seid Korić

(NCSA, University of Illinois at Urbana-Champaign), Qibang Liu, Diab Abueidda)

Qibang Liu and Diab Abueidda

(National Center for Supercomputing Applications, University of Illinois at Urbana-Champaign, USA)

13:55 / 14:15 Numerical Solution of Liquid Oscillations in Storage Tanks Connected to a Pipe Branch

Muris Torlak

(University of Sarajevo-Faculty of Mechanical Engineering)

Adis Bubalo

(JP Elektroprivreda BiH)

Safet Isić

(University "Džemal Bijedić" of Mostar)

14:15 / 14:30

Sensitivity of CFD Modelling of Utility Boilers to Different Coal Combustion Kinetic Parameters

Adnan Đugum

(University of Sarajevo-Faculty of Mechanical Engineering)

Kemal Hanjalić

(Delft University of Technology)

14:30 / 14:45

The Impact of Crosswind Induced Aerodynamics Loads on Vehicle Stability

Ammar Trakić

(University of Sarajevo-Faculty of Mechanical Engineering)

Mirsad Trobradović

(University of Sarajevo-Faculty of Mechanical Engineering)

Muris Torlak

(University of Sarajevo-Faculty of Mechanical Engineering)

14:45 / 15:00

Assessment of Passenger Comfort Using a One-dimensional Oscillatory Vehicle Model

Jasmin Šehović

(University of Sarajevo-Faculty of Mechanical Engineering)

Mirsad Trobradović

(University of Sarajevo-Faculty of Mechanical Engineering)

Haris Lulić

(University of Sarajevo-Faculty of Mechanical Engineering)

15:00 / 15:15

Application of 3D Scanning in Automotive Industry

Lara Sović, Mateo Bušić, Adis Muminović, Mirsad Trobradović

(University of Sarajevo-Faculty of Mechanical Engineering)

15:15 / 15:30

Multiple Linear Regression Analysis of Welding Parameters and Throat Thickness of GMAW Welds

Petar Tašić

(University of Sarajevo-Faculty of Mechanical Engineering)

Mirza Pašić

(University of Sarajevo-Faculty of Mechanical Engineering)

15:30 / 15:45

Quality Improvement within Measure Phase of LSS DMAIC through Failure Mode and Effect Analysis: Case Study of Automotive Company from Bosnia and Herzegovina

Ismar Alagić

(IUS; University of Zenica)

15:45 / 16:00

Increasing Energy Efficiency Model by Renewable Sources Use in Bosnia and Herzegovina Industry Sector

Hajrudin Džafo

(International Burch University; University "Džemal Bijedić" of Mostar)

16:00 / 16:15

Discussion and closure

ADVANCED ELECTRICAL POWER SYSTEMS

Samir Avdaković

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

Maja Muftić Dedović

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

Ajdin Alihodžić

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

12:30 / 13:30

Registration and Lunch

13:30 / 13:45

Application of the LU Factorization Method for the Analysis and Optimization of an Electrical Circuit Network

Melisa Haurdić

(Faculty of Technical Engineering, University of Bihać, Bosnia and Herzegovina)

13:45 / 14:00

Holistic consideration of sustainable energy transition in the field of electricity in Bosnia and Herzegovina

Damir Androšević

(Universite de Lorraine, Laboratoire ERPI, Nancy, France)

Sandra Bautista

(Universidad El Bosque)

Mauricio Camargo and Noureddine Takorabet

(Universite de Lorraine, Laboratoire ERPI, Nancy, France)

14:15 / 14:30

Effects of improving the energy performances of a road infrastructure by installing energy efficient LED lighting

Adnan Mujezinović, Ajdin Alihodžić, Maja Muftić Dedović, Nediz Dautbašić and Samir Avdaković

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

14:30 / 14:45

Application of Random Forest Method for Overhead Lines Magnetic Flux Density Estimation

Amina Tihak, Ajdin Alihodžić, Adnan Mujezinović and Emir Turajlić

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

14:45 / 15:00

Forecasting of PV production and consumer power demand smart low voltage grid using machine learning models

Maja Muftić Dedović, Adin Memić, Samir Avdaković, Ajdin Alihodžić and Nediz Dautbašić

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

15:15 / 15:30

Comparative Analysis of Multilevel Thresholding for Transmission Line Insulators Using PSO with Kapur and Otsu Entropy

Nermin Komar, Mirza Batalović, Emir Buza

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



20.06. Friday

CIVIL ENGINEERING

Naida Ademović (BHAAAS/University of Sarajevo-Faculty of Civil Engineering, Sarajevo, Bosnia and Herzegovina)

Nerma Lazović (University of Sarajevo-Faculty of Civil Engineering, Sarajevo, Bosnia and Herzegovina)

08:45 / 09:15 **Registration**

09:15 / 09:30 **Uncertainties in determining free-flow speed for two-lane rural highways**

Ammar Šarić, Mirza Pozder, Suada Sulejmanović, Sanjin Albinović, Žanesa Ljevo and Selma Spahić

(University of Sarajevo-Faculty of Civil Engineering, Sarajevo, Bosnia and Herzegovina)

09:30 / 09:45 **Connection Friction Coefficient with High Strength M 20 Bolts on Aluminum Structures**

Emir Hodžić

(International Burch University, Faculty of Engineering, Natural and Medical Sciences, BiH)

Sanin Džidić

(University of Bihać, Faculty of Technical Sciences, Bihać, BiH)

09:45 / 10:00

Axial Response of Short RC Columns

Amra Abdić

(University of Sarajevo-Faculty of Civil Engineering, Sarajevo, Bosnia and Herzegovina)

Amina Karavelić-Hadžimejlić

(University of Sarajevo-Faculty of Civil Engineering, Sarajevo, Bosnia and Herzegovina)

Senad Medić

(University of Sarajevo-Faculty of Civil Engineering, Sarajevo, Bosnia and Herzegovina)

10:00 / 10:30

Coffee break

10:30 / 10:45

Enhancing Construction Project Management Using BIM

**Žaneta Ljevo, Mirza Pozder, Suada Sulejmanović, Ammar Šarić, Sanjin Albinović,
and Amar Borić**

(University of Sarajevo-Faculty of Civil Engineering, Sarajevo, Bosnia and Herzegovina)

10:45 / 11:00

Seismic Vulnerability Assessment of Selected Buildings in Tuzla

Naida Ademović

(University of Sarajevo-Faculty of Civil Engineering, Sarajevo, Bosnia and Herzegovina)

11:00 / 11:15

Numerical Analysis of Tall Industrial Chimney under Wind Induced Dynamic Loads considering Soil-Structure Interaction

Emina Hadžalić

(University of Rijeka, Faculty of Civil Engineering, Rijeka, Croatia)

Nedim Tuno and Timur Grubić

(University of Sarajevo-Faculty of Civil Engineering, Sarajevo, Bosnia and Herzegovina)

11:15 / 11:30

Environmentally Resilient and Energy Efficient Retrofit Strategies for Historically Significant Buildings: Building Enclosure and Whole Building Energy Use Analysis

Sunčica Milošević and Ajla Akšamija

(University of Utah, Salt Lake City, Utah USA)

11:30 / 11:45

The impact of channelization of a natural stream on the change of hydraulic parameters at collision points with the highway

Nerma Lazović

(University of Sarajevo-Faculty of Civil Engineering, Sarajevo, Bosnia and Herzegovina)

Sadžida Murtić

(IPSA Institute, Sarajevo, Bosnia and Herzegovina)

11:45 / 12:00

Structural Assessment of the Bregava River Stone Arch Bridge

Emina Hajdo, Azra Kurtović

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

Kenan Imširpašić, Edin Jahić and Enes Lakota

(Infra Ltd Sarajevo, Sarajevo, Bosnia and Herzegovina)

12:00 / 13:30

Lunch

DATA SCIENCE AND GEOGRAPHIC INFORMATION SYSTEMS

Almir Karabegović (University of Sarajevo-Faculty of Electrical Engineering, Sarajevo, BiH, BHAAAS)

Jasminka Hasić Telalović (School of Science and Technology, Sarajevo, BiH)

Mirza Ponjavić (International Burch University, Sarajevo, BiH)

10:00 / 10:30 Registration

**10:30 / 10:45 Introductory word: Data Science and Geographic Information Systems
in Bosnia and Herzegovina**

Almir Karabegović

(University of Sarajevo-Faculty of Electrical Engineering, Sarajevo, BiH, BHAAAS)

10:45 / 11:00

Application of Graph Coloring to Class Scheduling

Fatka Kulenović

(University of Bihać, Technical Faculty, Bosnia and Herzegovina)

Sanel Gredelj

(University of Bihać, Technical Faculty, Bosnia and Herzegovina)

Husein Rošić

(University of Bihać, Technical Faculty, Bosnia and Herzegovina)

Šejla Jusić Gerzić

(University of Bihać, Technical Faculty, Bosnia and Herzegovina)

11:00 / 11:15

Noise Level Analysis in the City of Zadar

Vesna Poslončec-Petrić

(University of Zagreb-Faculty of Geodesy, Croatia)

Iva Cibilic

(University of Zagreb-Faculty of Geodesy, Croatia)

Juraj Perinić

(MGV d.o.o., Zagreb, Croatia)

Mario Zidar

(University of Zagreb-Faculty of Geotechnics, Varaždin, Croatia)

11:15 / 11:30

Enhancing Infrastructure Management: A Deep Dive into Mobile Laser Scanning and Point Cloud Classification

Marina Davidović Manojlović

(University of Novi Sad, Faculty of Sciences, Serbia)

Natalija Nikolić

(University of Novi Sad, Faculty of Sciences, Serbia)

Tijana Tomić

(University of Novi Sad, Faculty of Sciences, Serbia)

Dajana Tešić

(University of Novi Sad, Faculty of Sciences, Serbia)

11:30 / 11:45

Evaluation of optimal locations for installing so-lar power plants in the Northern Bosnia

Edin Hadžimustafić

(University of Tuzla- Faculty of Natural Sciences and Mathematics, Bosnia-Herzegovina)

Dževad Mešanović

(University of Tuzla- Faculty of Natural Sciences and Mathematics, Bosnia-Herzegovina)

11:45 / 12:00

Remote Sensing Applications for Analyzing Air Quality in Sarajevo's Lower Atmosphere

Admir Mulahusić, Jusuf Topoljak

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

Ivan Regoje

(Excellence AG, Germany)

Muamer Đidelića, Nedim Kulo, Adis Hamzić, Nedim Tuno

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

12:00 / 12:15

Integrating spatial data science tools into the system design: LSTM models for time-series COVID-19 data forecasting

Faris Mehmedović

(Info Studio d.o.o., Sarajevo, Bosnia and Herzegovina)

Almir Karabegović

(University of Sarajevo-Faculty of Electrical Engineering, Sarajevo, BiH, BHAAAS)

12:15 / 12:30

Short discussion - All participants

12:30 / 13:30

Lunch

13:30 / 13:45

Structural, Habitual and Spatial Impacts on Disease Occurrence on Trees in Historical Park Ilidža

Dženana Kumalić, Dino Hadžidervišagić, Damir Prljača, Azra Čabaravdić

(University of Sarajevo, Faculty of Forestry, Bosnia and Herzegovina)

13:45 / 14:00

Regional ionosphere modeling

Džana Halilović

(Independent Researcher)

Medžida Mulić

(University of Sarajevo-Faculty of Civil Engineering, Department of Geodesy and Geoinformatics, BiH)

Robert Weber

(Vienna University of Technology - Department of Geodesy and Geoinformation, Austria)

14:00 / 14:15

Overview of Coordinate Transformations Worldwide, in Balkan Countries and in Bosnia and Herzegovina

Dževad Krdžalić

(University of Sarajevo-Faculty of Civil Engineering, Department of Geodesy and Geoinformatics, BiH)

Jasmin Ćatić

(Federal Administration for Geodetic and Real Property Affairs, Sarajevo, Bosnia and Herzegovina)

Esad Vrce, Džanina Omičević, Ervin Redžepagić

(University of Sarajevo-Faculty of Civil Engineering, Department of Geodesy and Geoinformatics, BiH)

14:15 / 14:30

Modern Methods for Maintaining Cadastral Records: An Overview

Nedim Kulo, Jusuf Topoljak, Admir Mulahusić, Muamer Đidelića, Adis Hamzić and Nedim Tuno

(University of Sarajevo-Faculty of Civil Engineering, Bosnia and Herzegovina)

14:30 / 14:45

Hand Gesture Recognition for Smart Home Applications Using AlexNet

Arijana Beširović

(International Burch University, Sarajevo, Bosnia and Herzegovina)

Dejan Jokić

(International Burch University, Sarajevo, Bosnia and Herzegovina)

14:45 / 15:00

Short discussion - All participant

15:00 / 15:15

Closing words

INFORMATION AND COMMUNICATION TECHNOLOGIES

Aljo Mujčić (University of Tuzla -Faculty of Electrical Engineering, Bosnia and Herzegovina)

Mujo Hodžić (University of Zenica - Polytechnic Faculty, Bosnia and Herzegovina)

12:30 / 13:30 **Lunch**

15:30 / 16:00 **Registration**

16:00 / 16:15 **Neural Network-Based MPPT for Solar Photovoltaic Energy Optimization**

Una Drakulić

(University of Bihac-Technical faculty, Bosnia and Herzegovina)

Branko Blanuša

(University of Banja Luka-Faculty of Electrical Engineering, Bosnia and Herzegovina)

16:15 / 16:30 **Designing a Neural Network for Energy-Efficient Solar System Using Python**

Una Drakulić

(University of Bihac-Technical faculty, Bosnia and Herzegovina)

16:30 / 16:45 **Factors affecting IoT antenna bandwidth**

Admir Bašić

(University of Tuzla -Faculty of Electrical Engineering, Bosnia and Herzegovina)

Aljo Mujčić

(University of Tuzla -Faculty of Electrical Engineering, Bosnia and Herzegovina)

16:45 / 17:00

Analysis of the increase in attenuation of optical fiber splices due to the influence of water

Anis Maslo

(BH Telecom, Sarajevo, Bosnia and Herzegovina)

Mujo Hodžić

(University of Zenica - Polytechnic Faculty, Bosnia and Herzegovina)

17:00 / 17:15

Stabilization of an Inverted Pendulum: A Comparative Study of PID, Reinforcement Learning, and Integral Sliding Mode Control,

Ajna Balešić and Mehrija Hasičić

(International Burch University, Faculty of Engineering, Natural and Medical Sciences, Ilidža, BiH)

17:15 / 17:30

Comparative Analysis of PI and Fuzzy Logic Controllers in a MATLAB-Based Hand Rehabilitation Model

Ahmad Youssef, Jasna Hivziefedić, Dejan Jokić

(International Burch University, Department of Electrical and Electronics Engineering, Ilidža, Bosnia and Herzegovina)

17:30/ 17:45

Short discussion - All participants

17:45 / 18:00

Closing words

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