

SSET 2026

Detailed program

Section 1 - Student TST-IEDEEE - room 359

8:30-8:40: Darius-Alexandru TĂNĂSESCU, Assist. Prof. Iustin IVANCIU – *“Portable Mesh Networking Solution for Off-Grid Communications based on the Meshtastic Protocol”*

8:40-8:50: Mădălin-Emiluş-Aniel GAVRILAŞ, Assist. Prof. Iustin IVANCIU – *“Secure and Highly Available Enterprise Network Infrastructure Using Cisco Packet Tracer”*

8:50-9:00: Szilárd-Károly SOMOGYI, Assist. Prof. Tudor BLAGA – *“Cross-Platform Mobile Security Auditing and Automated Hardening Framework”*

9:00-9:10: David-Adrian CIOLOCA, Assist. Prof. Tudor BLAGA – *“Implementing a Zero Trust Network Access Architecture Using Open-Source Frameworks and Enterprise Switching”*

9:10-9:20: Maria Alexandra CRIŞAN, Assoc. Prof. Mihaela GORDAN – *“Hypespectral Face Recognition By Local Ternary Patterns and Histograms of Oriented Gradients”*

9:20-9:30: Fabian Daniel BUDE, Assist. Prof. Camelia FLOREA – *“Vehicle detection in parking lot images”*

9:30-9:40: Rebeca-Veronica PĂŞCUŢĂ, Assist. Prof. Ioana ILEA – *“Face Recognition Algorithm Based on Local and Global Image Features”*

9:40-9:50: Diana-Andreea VLAD, Assoc. Prof. Raul MĂLUŢAN – *“A Transfer Learning Approach to Finger Vein Recognition with Image Preprocessing”*

9:50-10:00: Alexandru-Teodor RADU, Assist. Prof. Iustin IVANCIU – *“DevSecOps Architecture for Supply Chain Security Using Keyless Signing and Kernel Monitoring”*

10:00-10:10: Sergiu-Bogdan RUS, Assist. Prof. Iustin IVANCIU – *“Design and Implementation of VaultCoder: A Local Autonomous Programming Agent Using CoALA Architecture”*

10:10-10:20: Claudia-Angela JAKAB, Assoc. Prof. Cosmin STRILEŢCHI – *“Robust Music Identification Across Diverse Modalities”*

10:20-10:30: Delia VOICAN, Assist. Prof. Cristian CODĂU – *“Machine Learning-Based Detection of Jamming Attacks in 5G New Radio Networks”*

10:30 – 10:45 Coffee break

10:45-10:55: Mark-Aris GERGELY, Prof. Virgil DOBROTĂ – *“A Proof-of-Concept Implementation of Segment Routing over IPv6 with IS-IS Emulated in an EVE-NG Network Laboratory”*

10:55-11:05: Mihnea-Cristian ARSENI, Prof. Virgil DOBROTĂ – *“Automated Deployment of a V2N Testbed in EVE-NG for IPv6 Multi-Path Communications”*

11:05-11:15: Radu Ștefan ZEMORA, Prof. Virgil DOBROTĂ – *“Interactive Trace of Paths for Inter-Site Communications in TUCN”*

11:15-11:25: Vlad-Andrei VLAICU, Assoc. Prof. Daniel ZINCA – *“Automated Attack Surface Discovery with LLM Assisted Reporting”*

11:25-11:35: Ștefan-Daniel NASTAS, Assoc. Prof. Cosmin STRILEȚCHI – *“Satellite Sandboxing System for Certifying Legitimacy of Firmware Modules”*

11:35-11:45: Mihai-Alexandru ILIE, Assoc. Prof. Cosmin STRILEȚCHI – *“A Multi-Tenant Container as a Service Platform: The LXC Sentinel Web App”*

11:45-11:55: Lenuța-Maria OLARIU, Assist. Robert BOTEZ – *“Monitoring and Securing Cloud-Native Infrastructures using eBPF and Falco”*

11:55-12:05: Adrian VERDE, Assist. Prof. Tudor BLAGA – *“Automated Security Audit and Remediation Dashboard for AWS Environments”*

12:05-12:15: Mihai Alexandru MĂTUȘA, Assist. Prof. Tudor BLAGA – *“Password Policies Among Top Global and Local Websites”*

12:15-12:25: Luca-Ioan SIMUȚ, Assist. Prof. Tudor BLAGA – *“Endpoint Security Posture Management”*

12:25-12:35: Andreea-Cristina UNGUR, Assoc. Prof. Raul MĂLUȚAN – *“A CNN approach to the classification of dermatological skin lesions”*

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Section 2 - Student EA-IEDEEE - room 41

8:30-8:40: Alexandru CÎMPEAN, Assoc. Prof. Mihai DĂRĂBAN, Prof. Ovidiu POP – *“Predesign Power Distribution Network Analysis Using Hierarchical SPICE Modeling”*

8:40-8:50: Daniela-Ileana DRULE, Prof. Ovidiu POP – *“Automated Testing System Based on the LabVIEW Programming Environment”*

8:50-9:00: Nicoleta Elena BONDRIC, Assoc. Prof. Adrian TĂUT – *“A Matlab Platform for Control and Analyze of BLDC Motor Using Sensorless FOC”*

9:00-9:10: Diana-Elena BODEA, Andreea POPESCU, Georgiana ORDEAN, Assoc. Prof. Toma PĂTĂRĂU – *“Thyristor firing angle control”*

9:10-9:20: Ancuța-Georgiana PELIN, George-Gabriel SIMEON, Lei ZHANG, Assist. Prof. Raul ONEȚ – *“Computer Aided CAN Transmitter Design for Optimized Area”*

9:20-9:30: Sercan SERT, Assist. Prof. Raul ONEȚ – *“Analysis of class AB amplifiers for fast-transient capacitor-less LDO regulators”*

9:30-9:40: Marius-Erik DUMNICI, Petru Rareș MOLDOVAN, Mircea-Radu CIAMBUR, Assist. Prof. Raul ONEȚ – *“Split-Length Frequency Compensation for LDO PSRR Improvement”*

9:40-9:50: Rareș Cristian PETRIC, Rareș Ștefan TCACIUC, Robert Gabriel TARNIȚĂ, Assoc. Prof. Paul FARAGO – *“Hardware-Assisted AES-128 Encrypted Communication Channel: A Didactic Implementation Using FPGA and ESP32”*

9:50-10:00: Daniel MARCHIȘ, Assoc. Prof. Paul FARAGO - *AlcoLock: “An ESP32-Based Breathalyzer Engine Interlock System with Real-Time IoT Monitoring”*

10:00-10:10: Cristian OPREAN, Assoc. Prof. Liviu VIMAN – *“Wireless Glove Teleoperation of a Robotic Arm”*

10:10-10:20: Andreea-Beatrice VEZAN, Assoc. Prof. Anca APATEAN – *“Raspberry Pi System for Real-Time Multiple-Choice Test Evaluation”*

10:20-10:30: Benjamin DÎRJAN, Rober-Gabriel TARNIȚĂ, Assoc. Prof. Laura IVANCIU – *“Design and Implementation of a Standalone 8x8x8 RGB LED Volumetric Display”*

10:30 – 10:45 Coffee break

10:45-10:55: Alexandra-Gabriela BROJBAN, Assoc. Prof. Laura IVANCIU – *“Detection and Classification of Through-Hole Technology Electronic Components using YOLOv11 and the ESP32-CAM-MB Module”*

10:55-11:05: Cezara-Patricia ALBINETZ, Assoc. Prof. Laura IVANCIU – *“ESP-Based Automated Recycling System with Image Processing and Multi-Sensor Detection”*

11:05-11:15: Sofia OȚET, Assist. Prof. Vlad BANDE – *“Intelligent Greenhouse Monitoring and Control System”*

11:15-11:25: Adina-Ioana COSTEA, Assist. Prof. Rajmond JÁNÓ- *“Design and Implementation of a Web-Based Classroom Reservation System for Academic Environments”*

11:25-11:35: Andrei-Daniel BOTA, Assist. Prof. Robert GROZA – *“Design and Implementation of an ECG Analog Front-End”*

11:35-11:45: Andrei Nicola REBELEȘ, Assoc. Prof. Emilia ȘIPOȘ – *“State Driven Geospatial Orchestration for Dynamic Route Optimization in Logistics”*

11:45-11:55: Adrian CHERA, Assist. Prof. Mihaela CÎȘLARIU – *“Skin Cancer AI Recognition”*

11:55-12:05: Raul CARDOȘ, Georgiana NAGY, Assoc. Prof. Mihaela GORDAN – *“Adaptive Hybrid Inpainting for Specular Highlight Removal in Colonoscopy Images”*

12:05-12:15: Andrei-Silviu HALIȚ, Assoc. Prof. Laura IVANCIU – *“BLE indoor positioning system using Kalman filter and Weighted Centroid Localization”*

12:15-12:25: Alexandra-Rebeca MAG, Assoc. Prof. Laura IVANCIU – *“Real-Time Meteor Detection in Night Sky Imagery Using YOLO26 with Oriented Bounding Boxes”*

12:25-12:35: Daria POP, Assoc. Prof. Laura IVANCIU – *“Automated System for Canine Emotion Classification using Mel-Spectrograms and Convolutional Neural Networks”*

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Section 3 - Master-Doctor - room 368

8:30-8:40: Petru-Rareş MOLDOVAN, George-Gabriel SIMEON, Cosmin-Sorin PLEŞA, Assoc. Prof. Marius NEAG – *“Dual-Loop Low-Power Nonlinear High-Precision Capacitorless 1.5V Voltage Regulator”*

8:40-8:50: Adrian BINDER, Assist. Prof. Ervin SZOPOS, Assoc. Prof. Botond KIREI – *“Self-Interference Assessment for an In-Band Full-Duplex Indoor Wireless Transmission”*

8:50-9:00: Iulian-Teodor GOIA, Marius-Claudiu PETREUŞ, Assist. Prof. Raul ONET – *“Area-Efficient Active Low-Pass Filter for Noise Reduction in Integrated Voltage References”*

9:00-9:10: Lucas Ştefan MANCIU, Prof. Dorin PETREUŞ – *“Comparative Study of Resonate Tank Design for LLC Converters”*

9:10-9:20: Daniel Andrei BULUGHEANĂ, Prof. Dorin PETREUŞ – *“Implementation of a general mathematic model for a PEM fuel cell”*

9:20-9:30: Lara MOGA, Prof. Dorin PETREUŞ – *“Sizing and Modelling for Proton Exchange Membrane Fuel Cells”*

9:30 – 9:45 Coffee break

9:45-9:55: Vlad VELICIU, Assoc. Prof. Liviu VIMAN – *“Low-Noise Voltage-Controlled Current Source Concept”*

9:55-10:05: Andrei-Alexandru EVTEI, Prof. Virgil DOBROTĂ – *“An eBPF/XDP Security Framework for Distributed Denial-of-Service Resilient Hybrid Clouds”*

10:05-10:15: Valentin-Dimitrie POPESCU, Prof. Mircea GIURGIU – *“Speech Enhancement using Teacher-Student Deep Learning for Embedded Hardware”*

10:15-10:25: Tudor-Gabriel PASCARU, Assist. Prof. Ştefania BENEĂ – *“Deepfake Video Detection using Sparse Frame Sampling and Logit Aggregation”*

10:25-10:35: Alexandru-Octavian BOGEANU-POPA, Prof. Romulus TEREBEŞ – *“Block-Hankel Structured Low-Rank Approximation for Localized Deepfake Artifact Detection”*

10:35-10:45: Alexandru-Octavian BOGEANU-POPA, Assoc. Prof. Paul FARAGO, Prof. Romulus TEREBEŞ – *“Applying Game Theory to Multimodal Deepfake Detection”*