

SSET 2025

Detailed program

Section 1 - Student TST-IM - room 368

8:15 – 8:30: Sebastian-Iulius HOMEI, Assist.prof. Iustin IVANCIU – “High Availability Network Infrastructure Using Cisco Packet Tracer”

8:30 – 8:45: Ioana-Alexandra BOTĂ, Assist.prof. Iustin IVANCIU – “Automated Threat Detection and Notification System using AWS GuardDuty”

8:45 – 9:00: Vasile-Alexandru IVAN, Assist.prof. Ioana ILEA – “Target Recognition Algorithm, using Synthetic Aperture Radar Imaging”

9:00 – 9:15: Andrei AXENTE, Prof. Mircea GIURGIU – “Robust Audio Deepfake Detection Using Deep Neural Networks and Pipeline Optimization”

9:15 – 9:30: Anda TĂTAR, Assoc.prof. Mihaela GORDAN – “A Comparison of ORB and LBP Descriptors for Face Expression Recognition”

9:30 – 9:45: Anda CSEH, Assoc.prof. Bogdan ORZA – “A Machine Learning Based Painting Genre Classification System from Face Appearance”

9:45 – 10:00: Daiana-Alexandra HORVATH, Assoc.prof. Cosmin STRILEȚCHI – “A classical vs. AI comparative approach to image segmentation”

10:00 – 10:15 Coffee break

10:15 – 10:30: Adelina-Nicoleta PÎRJOL, Assist. Robert BOTEZ – “A Kubernetes-Based Architecture for Tier-Aware Multimedia Streaming with Quality-of-Service Management”

10:30 – 10:45: Tudor-Gabriel FURDUI, Prof. Virgil DOBROTĂ – “Overview of 5G KPI Analysis: Cloud versus Legacy Implementations”

10:45 – 11:00: Denis-Andrei TODORUȚ, Assist.prof. Ioana ILEA – “Fire Risk Assessment Based on Texture and Color Information from Remote Sensing Images”

11:00 – 11:15: Sara-Damaris BORODI, Assist.prof. Iustin IVANCIU – “Automatic Application Deployment System Using GitHub Actions and Azure”

11:15 – 11:30: Ștefan-Darian CÎRNAT, Prof. Virgil DOBROTĂ – “Isolation Forest Anomaly Detection and Long Short-Term Memory Traffic Prediction”

11:30 – 11:45: David-George HIDEG, Assist.prof. Iustin IVANCIU – “Inter-Cluster Communication in Kubernetes Using Istio Service Mesh”

11:45 – 12:00: Mihai-Cristian FUFEZAN, Assist. Robert BOTEZ – “Enhancing Student Learning with a Retrieval-Augmented Generation Chatbot”

12:00 – 12:15: Dan CUCIUREANU, Assist. Robert BOTEZ – “Monitoring-based Horizontal Autoscaling of Virtual Machines in Private Cloud Infrastructures”

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Section 2 - Student EA - room 359

8:15 – 8:30: Alexandro VIDICAN, Assoc.prof. Mihaela CÎRLUGEA – “Sound Sculpting Synthesizer using MatLab”

8:30 – 8:45: Andra SIMEDRONI, Assoc.prof. Lorant SZOLGA – “Mole Analyzer Based on ESP32-CAM”

8:45 – 9:00: Alexandru Andrei ALEXA, Assoc.prof. Lorant SZOLGA – “DVD Player Conversion into a Laser Confocal Scanning Microscope”

9:00 – 9:15: Raul-George HORGOS, Assoc.prof. Liviu VIMAN – “Thermal Sensing Camera”

9:15 – 9:30: Maria MIHAI, Assoc.prof. Mihaela GORDAN – “A CT Scan-Based Multi-Slice Nodule Detection System with Volumetric Features and SVMs”

9:30 – 9:45: Cristian Valentin CHIRIAC, Prof. Dorin PETREUȘ – “Digitally Controlled High Performance DC Bench Power Supply”

9:45 – 10:00: David-Sorin ROȘCA, Prof. Sorin HINTEA, Paul Gabriel POP, Assist. Claudia CORDOȘ – “Seismic activity measurement system based on FPGAs using SPI Engine”

10:00 – 10:15 Coffee break

10:15 – 10:30: Major-Norbert APAI, Esteban FORESI, Valeria GÂRLEANU, Ovidiu Aurelian CIUPE, Assist.prof. Ligia CHIOREAN – “Website for optimizing stock monitoring and measurements in Tenaris Silcotub company”

10:30 – 10:45: Mihai-Cătălin ILIE, Assist.prof. Ionel BACIU – “Parking assistance system based on sensors and wireless remote control using the ESP-NOW network protocol”

10:45 – 11:00: Radu Bogdan SABĂU, Assist.prof. Radu ETZ – “Speed Control of a Permanent Magnet Synchronous Machine”

11:00 – 11:15: Adina Mariana BODEA, Assoc.prof. Mihaela GORDAN – “Traditional Vs. Deep Learning Models for Carotid Segmentation in Ultrasound Images”

11:15 – 11:30: Andrei VASIU, Assoc.prof. Liviu VIMAN - “Smart Autonomous Robot for Fire Detection and Suppression”

11:30 – 11:45: Laurențiu-Vlad BOBOCEA, Assist.prof. Toma PĂTĂRĂU – “Smart Chess Board Using AI”

11:45 – 12:00: Andrei NEGREA, Assoc.prof. Cristian FĂRCAȘ – “Automatic parking barrier opening system using a Beacon”

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Section 3 - Master-Doctor - room BT 2.04

8:30 – 8:45: Elena-Andreea MARIAN, Assoc.prof. Marius NEAG – “Design methodology for a low-power IC relaxation oscillator”

8:45 – 9:00: Maria-Zoița ANDRICA, Prof. Sorin HINTEA – “Performance analysis of the multiplier implemented with Booth's algorithm using integration samples with the VHDL language and Basys 3 FPGA board”

9:00 – 9:15: Raluca-Cosmina-Maria ARDELEAN, Assoc.prof. Laura IVANCIU – “Novel method for UCF101 dataset division for HAR and hybrid CNN and LSTM architecture”

9:15 – 9:30: Iulian-Teodor GOIA, Marius PETREUȘ, Assist.prof. Raul ONET – “Area-Efficient Active Low-Pass Filter for Noise Reduction in Integrated Voltage References”

9:30 – 9:45: Valentin-Dimitrie POPESCU, Prof. Mircea GIURGIU – “Quantized Residual CNN Edge Node for Real-Time Vibration Classification and Secure OTA Updates”

9:45 – 10:00 Coffee break

10:00 – 10:15: Cătălin-Ionuț OPRIȚA, Octavian-Constantin AXINTE, Assoc.prof. Mihai DĂRĂBAN – “Signal Integrity Analysis on a RGMIIv2.0 Interface”

10:15 – 10:30: Sebastian-Adrian BABICIU, Assist.prof. Iustin IVANCIU – “GitOps-Driven Approach for Automating Cloud Infrastructure on GCP with Terraform”

10:30 – 10:45: Orlando Sebastian BUHAIU, Assoc.prof. Raul MĂLUȚAN – “AlidoUP Invoice: Fast and secure e-invoicing platform on AWS with Azure DevOps CI/CD”

10:45 – 11:00: Petru-Rareș MOLDOVAN, Cosmin-Sorin PLEȘA, George-Gabriel SIMEON, Assoc.prof. Marius NEAG – “Stability Analysis of Multi-Loop Voltage Regulators using Signal Flow Graphs and Driving Point Impedance: A Dual-Loop Case Study”

