

## **Conf.univ.dr. Eugen Petac**

### **Licenta (Informatica si Matematica-Informatica)**

1. Solutii Python pentru automatizarea retelor IP
2. Solutii pentru scanarea vulnerabilitatilor aplicatiilor Web
3. Scanarea vulnerabilitatilor de securitate ale retelelor. Aplicatii Python
4. Hub digital pentru agricultura
5. Emularea retelelor cu OpenDayLight
6. Emularea retelelor cu ONOS (Open Network Operating System)
7. Emularea retelelor Wireless LAN cu Mininet
8. Sistem de achizitie a datelor bazat pe Raspberry PI
9. Sistem de achizitie a datelor bazat pe platforma Arduino
10. Sistem de detectare a intruziunilor bazat pe Raspberry PI
11. Sistem de navigatie cu OpenCPN si Raspberry PI
12. Solutie IoT bazata pe ROS si Raspberry PI (ROS-Robot Operating System)
13. Solutie IoT bazata pe ROS si Arduino (ROS-Robot Operating System)
14. Solutii de securitate bazate pe HIDS (Host-based Intrusion Detection Systems)
15. Solutii de securitate bazate pe NIDS (Network-based Intrusion Detection Systems)
16. Programarea retelelor in GO
17. Anonimitatea in retelele IP. Aplicatii Python
18. Verificarea autenticității și integrității imaginilor digitale
19. Identitate digitala bazata pe tehnologia Blockchain
20. Aplicatii NFT Blockchain (NFT: Non-Fungible Token)
21. Comunicatii bazate pe tehnologia Blockchain. Aplicatii Python

### **Licenta (Informatica in limba engleza)**

1. Mobile Application Development with Python
2. Data Acquisition System Based on Raspberry PI
3. Data Acquisition System Based on the Arduino Platform
4. IoT solution based on ROS and Raspberry PI (ROS-Robot Operating System)
5. GPS Application Based on Raspberry PI
6. SDN LAN Emulation with OpenDayLight
7. SDN Wireless LAN Emulation with Mininet
8. Network Programming in GO
9. Network Automation Solution with Ansible
10. Intelligent Network Penetration Testing
11. DHCPAttack and Counter Defense Mechanisms

## **Disertatie (CSML)**

1. SDN Wireless LAN Emulation with Mininet
2. SDN LAN Emulation with OpenDayLight
3. SDN Emulation with ONOS (Open Network Operating System)
4. Network Virtualisation with Docker
5. Ransomware Attack and Counter Defense Mechanisms
6. DDOS Attack and Counter Defense Mechanisms
7. Machine learning Based Solutions for Securing IP Networks
8. Machine learning Based Solutions for Securing Software-Defined Networks
9. Machine learning Based Solutions for Routing in IP Networks
10. Machine learning Based Solutions for Software-Defined Networks
11. Communications Based on Blockchain Technology. Python Applications
12. Digital Identity Based on Blockchain Technology
13. Verification of Authenticity and Integrity of Digital Image Data
14. IoT Solutions Based on Blockchain Technology
15. Discovering Hidden Data Through Steganalysis
16. Anonymity Solutions in IP Networks. Python Applications

## **Disertatie (MVMOD)**

1. Dezvoltarea aplicatiilor IoT cu ROS si Raspberry PI (ROS-Robot Operating System)
2. Sistem de achizitie a datelor bazat pe Raspberry PI
3. Sistem de achizitie a datelor bazat pe platforma Arduino
4. Emularea retelelor cu OpenDayLight
5. Solutii IoT bazate pe tehnologia Blockchain
6. Comunicatii P2P bazate pe tehnologia Blockchain. Aplicatii Python
7. Emularea retelelor cu OpenDayLight
8. Emularea retelelor cu ONOS (Open Network Operating System)
9. Emularea retelelor Wireless LAN cu Mininet
10. Solutii de anonimitate in retelele IP. Aplicatii Python