Plenary Session Excellence Awards

- 1. "Command and Control Communication Systems in Romanian Maritime and Aerial Operations" **stud. Rareş IORGA**, Scientific Advisor Lecturer Daniela NAGY, PhD, "Henri Coanda" Air Forces Academy;
- 2. "Marine Navigation Software SailXplorer" **stud. Andreea Monica TĂNASE**, Scientific Advisor Lecturer Elena Grațiela ROBE-VOINEA, PhD, Romanian Naval Academy;
- 3. "Nicotine Risk or Pleasure" **stud. Bianca-Gabriela ENE**, Scientific Advisor Lecturer Cristina-Andreea TUDOR, PhD, Romanian Naval Academy.

CADET-NAV 2024 Awards by Sections

1. Navigation and Transport

Excellence Award: (ID 100) Development of a Computation Program for Determining the Minimum Safe Under-Keel Clearance in Navigation Areas with Tidal Variability

Author: stud. Mihai-Danut TIMOFTE

Scientific Advisor: Lecturer eng. Elena-Gratiela ROBE-VOINEA, PhD

Institution: "Mircea cel Bătrân" Naval Academy, Constanta

1st Prize: (ID 19) Global Impact of the New Conflict in The Red Sea Waters

Author: stud. Eduard-Gabriel BUGA

Scientific Advisor: Chief Commissioner, Assoc prof. Elena-Loredana

PÎRVU, PhD

Institution: "Alexandru Ioan Cuza" Police Academy

2nd Prize: (ID 320) Low Light Enhancing System

Authors: stud. Dalia MESHINSH, stud. Amalia-Elena MARIN

Scientific Advisor: Assoc. prof. Ciprian Ion RIZESCU, PhD

Institution: Politehnica București National University for Science and Technology

3rd Prize: (ID 376) Alternative Methods of Ship Positioning in Terms of Current Military Situation

Authors: stud. Eliza MITUŁA, stud. Julia NOWOTKA, stud. Jakub JURA

Scientific Advisor: Captain (N) Mariusz WAŻ, PhD.

Institution: Polish Naval Academy

2. Engineering and Management

Excellence Award: (ID 154) Application for Plant Disease Detection Using Deep Learning

Authors: stud. Dragos-Florentin GOGOESCU, stud. Alexandru Mihai BARBU

Scientific Advisor: Assoc. Professor Ciprian Ion RIZESCU, PhD

Institution: National University of Sciences and Technology Politehnica Bucuresti

1st **Prize:** (ID 360) Navigating the Nexus of Culture and Strategy: A Comprehensive Examination of Negotiation Techniques and Tactics in International Business

Authors: stud. Ioana-Octaviana MĂNĂILĂ, stud. Nicușor-Cristian COMĂRNICEANU

Scientific Advisor: Assoc. Prof. Gheorghe GRECU, PhD

Institution: "Mircea cel Bătrân" Naval Academy, Constanta

2nd **Prize:** (ID 318) Designing and Implementing an Advanced Positioning System for Mobile Targets

Authors: stud. Andrei-Ioan CHEPTEA, stud. Alexandru Gabriel BOLOCAN

Scientific Advisor: Assoc. prof. eng. Ciprian Ion RIZESCU, PhD

Institution: Politehnica București National University for Science and Technology, Faculty of Mechanical Engineering and Mechatronics

3rd Prize: (ID 343) A History of The Strategy - From Battlefield to Boardroom: The Journey of Strategic Concepts

Author: stud. Ioan Ștefan MILITARU

Scientific Advisor: Major Superior Instructor Gabriela NICOARĂ, PhD. Institution: National Defense University "Carol I", Bucharest, Romania

3. Military Sciences and Information

Excellence Award: (ID 267) Hybrid War: The Power of Words in An Era of Propaganda and Disinformation

Author: stud. I.-A. F.

Institution: "Mihai Viteazul" National Intelligence Academy Bucharest

1st Prize: (ID 1) Improvement of Military Medical Evacuation

Author: stud. Todor TACHEV

Scientific Advisor: LTCR Stanislava STEFANOVA

Institution: "Nikola Vaptsarov" Naval Academy, Varna, Bulgaria

2nd Prize: (ID 249) Production of Fake News with the Help of Artificial

Intelligence

Author: stud. Florin BRĂDEAN

Scientific Advisor: Instr. Sorin LICA

Institution: Police Academy "Alexandru Ioan Cuza" Bucharest

3rd Prize: (ID 64) Modafinil

Author: stud. Maria Antoanela BADEA

Scientific Advisor: Capitan Marius Emilian ANDREIANA

Institution: Medical Military Institute

4. Electrical Engineering

Excellence Award: (ID 282) The use of Deep Learning Algorithms in Voice

Signal Processing

Author: stud. Raul-Petru PLIC

Scientific Advisor: Assist. prof. Annamaria SÂRBU, PhD

Institution: "Nicolae Bălcescu" Land Forces Academy, Sibiu

1st Prize: (ID 247) Marine Systems and Equipment - Health Condition

Monitoring

Authors: stud. Medina-Mihaela DIACONU, stud. Robert-Gabriel

ONETE

Scientific Advisor: Prof. eng. Gheorghe SAMOILESCU, PhD

Institution: "Mircea cel Bătrân" Naval Academy, Constanta

2nd **Prize:** (ID 276) Arduino Applications in Military Domain

Author: stud. Cristian ŞANDOR

Scientific Advisor: Lecturer Cornelia-Victoria ANGHEL-DRUGĂRIN, PhD

Institution: Babeș-Bolyai University Engineering Faculty

3rd Prize: (ID 281) Implementation of a Monitoring System for a Data

Center

Author: stud. Elena-Ariana MANDA

Scientific Advisor: Lt. Col. Adrian MIHĂILEANU

Institution: "Nicolae Bălcescu" Land Forces Academy, Sibiu

5. Weapons and Communications

Excellence Award: (ID 13) Simulation Over the Impact of a Sting Ray Torpedo Against a Submerged Medium-Sized Submarine

Authors: stud. Nicolae CARACOSTEA

Scientific Advisors: Lecturer eng. Gheorghe ICHIMOAEI, PhD, Assoc. prof. eng. Ioan-Cristian SCURTU, PhD.

Institution: "Mircea cel Bătrân" Naval Academy

1st Prize: (ID 382) Improving Communication between Instructor and Student to Optimize Onboard Armament

Authors: stud. Dragoș TUDOR, stud. Mihai PĂDUROIU

Scientific Advisor: Oliver CIUICĂ

Institution: "Henri Coanda" Air Forces Academy

2nd Prize: (ID 104) Maritime Innovation: Optimizing Ship Operations with

Drone Technology

Authors: stud. Cristina TAIFAS

Scientific Advisor: Lecturer Viorel COSTACHE, PhD

Institution: "Mircea cel Bătrân" Naval Academy

3rd Prize: (ID 108) The Impact of the Human Factor on Information Security

Authors: stud. Mihaela POPOVSCAIA

Scientific Advisor: Igor ZAVALSKI

Institution: "Alexandru cel Bun" Military Academy of the Armed Forces

6. Mechanical Engineering

Excellence Award: (ID 378) Python App for Submarine Immersion Control

Author: stud. Cătălin-Costin VLAD

Scientific Advisors: Lecturer eng. Elena-Grațiela ROBE-VOINEA, PhD, Scientific Researcher 3 eng. Alexandru PINTILIE, PhD.

Institution: "Mircea cel Bătrân" Naval Academy, Constanta

1st Prize: (ID 299) Influence of Turbocharger in Ship Propulsion.

Author: stud. Mihai MAESCHI

2nd Prize: (ID 372) Hydrodynamic Analysis of Usv's Hull with Computational Fluid Dynamics

Author: stud. Sabina-Andreea DIACONESCU

Scientific Advisor: Assoc. prof. eng. Ionuț-Cristian SCURTU, PhD

Institution: "Mircea cel Bătrân" Naval Academy, Constanta

3rd Prize: (ID 180) Calculus of Volume Hull and the Displacement of a Ship

Using C++ Programming Language

Author: stud. Daniela PETCU

Scientific Advisor: Assoc. prof. Mihaela-Greti MANEA, PhD Institution: "Mircea cel Bătrân" Naval Academy, Constanta

7. Fundamental Sciences

Excellence Award: (ID 34) Expanding Functions Past Their Domain of

Definition

Authors: stud. Silviu-Andrei PAP, stud. Bianca SFARGHIU

Scientific Advisor: Prof. Dan LASCU, PhD Habil.

Institution: "Mircea cel Bătrân" Naval Academy, Constanta

1st Prize: (ID 359) Signal Reconstruction Using Groebner Bases

Author: stud. Andreea-Georgiana RADU

Scientific Advisor: Assoc. Prof. Anda Georgiana OLTEANU, PhD

Institution: "Mircea cel Bătrân" Naval Academy, Constanta

2nd Prize: (ID 7) Application and Strategic Importance of Medical Education in the Army

Author: stud. Yoanna GABROVSKA

Institution: "Nikola Vaptsarov" Naval Academy

3rd Prize: (ID 280) Innovations in Fraud Detection and Prevention Using Artificial Intelligence

Authors: stud. Maria-Cornelia SĂRARU, stud. Valentin MUNTEAN

Scientific Advisor: Col. Prof. Marilena MOROŞAN, PhD

Institution: National Defense University "Carol I" of Bucharest

8. Foreign Languages

Excellence Award: (ID 353) L'Intelligence Artificielle- une Opportunité

Pour La Criminalité Organisée?

Author: stud. Alexandra ISERESCU

Scientific Advisor: Lecteur d'Universite Ligia CORNECIU

Institution: "Alexandru Ioan Cuza" Police Academy

1st **Prize:** (ID 2) Winston Churchill – A Triumphant Journey from Childhood to World Leadership

Authors: stud. Denis-Ionut-Catalin CHIRITA, stud. Valentin Daniel SMEIANU

Scientific Advisor: Assoc. Prof. Brandusa-Oana NICULESCU, PhD

Institution: "Nicolae Balcescu" Land Forces Academy, Sibiu

2nd Prize: (ID 255) Symbols in Our Lives vs. Symbols in the Army

Author: stud. Maria-Teodora CUREA

Scientific Advisor: Lecturer Edith-Hilde KAITER, PhD.

Institution: "Mircea cel Bătrân" Naval Academy

3rd Prize: (ID 87) The Recent History of The British Armed Forces: A New

Millennium, New Challenges – From 2000 To Now

Author: stud. Vlad-Adrian POP

Scientific Advisor: Assistant Professor Lucia-Larissa MORAR, PhD

Institution: "Nicolae Balcescu" Land Forces Academy of Sibiu

9. Students' experiences in International Exchanges

Excellence Award: (383) Students' Experiences in International Exchanges

- Enhancing Military Professionalism: Exploring

Author: stud. Mihai PĂDUROIU

Scientific Advisor: Cosmina ROMAN

Institution: "Henri Coanda" Air Forces Academy

1st Prize: Dyba JAKUB

Institution: Military University of Technology, Poland

2nd Prize: Serghei CARAION

Institution: Military Academy "Alexandru cel Bun", Republic of Moldova

3rd Prize: Alexandru DIACU

Institution: "Mircea cel Bătrân" Naval Academy, Constanta