



# PERSONAL INFORMATION Oana Andreea RUȘANU



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Gender Female | Nationality Romanian

Web Pages <a href="https://sciprofiles.com/profile/831557">https://sciprofiles.com/profile/831557</a> and <a href="https://www.researchgate.net/profile/Oana-Rusanu">https://www.researchgate.net/profile/Oana-Rusanu</a> <a href="https://www.researchgate.net/profile/0ana-Rusanu">https://www.researchgate.net/profile/0ana-Rusanu</a> <a href="https://www.researchgate.net/profile/0ana-Rusanu">https://www.researchgate.net/profile/0ana-Rusanu</a> <a href="https://www.researchgate.net/profile/0ana-Rusanu">https://www.researchgate.net/profile/0ana-Rusanu</a> <a href="https://www.researchgate.net/profile/0ana-Rusanu">https://www.researchgate.net/profile/0ana-Rusanu</a> <a href="https://www.researchgate.net/profile/0ana-Rusanu">https://www.researchgate.net/profile/0ana-Rusanu</a> <a href="https://www.researchgate.net/profile/0ana-Rusanu">https://www.researchgate.net/profile/0ana-Rusanu</a> <b style="text-align: center;">https://www.researchgate.net/profile/0ana-Rusanu</a>

### WORK EXPERIENCE

October 2018 – Present

## Junior Instructor (Cadru Didactic Asociat)

Transilvania University of Brasov – Faculty of Electrical Engineering and Computer Science Faculty of Electrical Engineering and Computer Science

Teaching laboratory classes in the following subjects:

- Virtual Instrumentation;
- Artificial Intelligence;
- Microcontrollers & Microprocessors;
- Medical Informatics.

# September 2017 – Present Software Test Engineer – Middle Level

- Preh Brasov, Romania
- Execution of manual and automated test cases based on software requirements;
- Review on software requirements and test-cases specifications;
- Creation and implementation of test-cases;
- Development of automated CAPL scripts aimed for software testing activities;
- Development of LabVIEW based applications for software testing tasks comparing images; checking buttons functionality; calculation of checksums / CRC;
- Delivering training sessions to new colleagues;
- Creation of documentation for new software testing strategies;
- Involvement rated to 50% on team projects and 50% on individual projects;
- General knowledge regarding working with different software testing tools such as: Vector CANoe
   based on CAN and LIN communication protocols, Eclipse TTCN-3, IBM Doors, Surround SCM, TestTrack, Ford Diagnostic Engineering Tool, Diagnostic Script Setup, Diagnostic Script Player, BMW E-Sys, Ediabas, Diagnoser and flashing instrument; GÖPEL Electronic Dragon Suite LVDS Viewer; MUM Melexis Universal Master; Melibox Melibu
- Business or sector: Automotive Software Validation/Testing

# June 2016 – August 2017 Master Student Job (Administrative Support Engineering)

Autoliv Brasov, Romania

- Gaining experience in LabVIEW graphical programming environment by accepting the proposed challenges regarding both the development of three major software projects and some improvements brought to another project related to passive safety systems;
- Writing the user instructions for the testing systems based on the LabVIEW software applications
- Involvement rated to approximately 100% on individual projects;
- Independent working on all software stages of development the testing solutions;
- Delivering training sessions to the technical staff;
- Creation of documentation for the newly developed LabVIEW applications; Business or sector: Automotive – Engineering and Development

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## <sup>2017 – 2024</sup> Transilvania University of Brasov, Romania – PhD Student

Title of Doctoral Thesis: Research on the Use of Brain-Computer Interfaces in Extending the Functionality of Bio-mechatronic Systems Field of Doctoral Studies: Mechanical Engineering

Department: Product Design, Mechatronics and Environment



Oana Andreea RUS

2015 – 2017	Transilvania University of Brasov, Romania – Master's Degree Programme of Study: Mechatronic systems for industry and medicine, Dissertation Exam passed with the highest grade: 10.00 Faculty of Product Design and Environment, Graduation average: 10.00 Field of study: Mechatronics and Robotics
2015 – 2016	Transilvania University of Brasov, Romania – Pedagogical Second Module Psycho-pedagogical Training Programme – The second module organized by the Department for Teaching Staff Training, Final Exam passed with the highest grade: 10.00
2012 - 2015	Transilvania University of Brasov, Romania – Pedagogical First Module
	Psycho-pedagogical Training Programme - The first module organized by the Department for Teaching Staff Training, Final Exam passed with the highest grade: 10.00
2011 - 2015	Transilvania University of Brasov, Romania – Bachelor's Degree
	Programme of study: Medical Engineering, Bachelor Exam passed with the highest grade: 10.00 Faculty of Product Design and Environment, <i>Valedictorian</i> with the graduation average: 9.84 / 10.00 Field of study: Applied Engineering Sciences
2007 - 2011	National College Andrei Saguna of Brasov, Science of Nature Intensive English class
1000 2007	Graduation average: 9.65 / 10.00 Romanian Baccalaureate Average (subjects: romanian language, mathematics, physics): 9.51.
1999 - 2007	Gymnasium School No. 27 "Anatol Ghermanschi" of Brasov

#### PERSONAL SKILLS \_

Mother tongue(s) Romanian

Other language(s)	UNDERSTANDING		SPEAKING		WRITING		
	Listening	Reading	Spoken interaction	Spoken production			
English	B2	B2	B2	B2	B2		
	Certificate of English language competence (organized to the National College "Andrei Saguna" of Brasov, May 2011)						
German	B1	B1	A2	A2	B1		
	Certificate of German language competence – The Intermediate Level (B1/2) (organized by the Link - Language School of Brasov, October 2018 – July 2020) Certificate of German language competence – The First Module (organized by the Magnus School of Brasov, June 2017)						
	Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2 Proficient user Common European Framework of Reference for Languages						

Communication skills • Good communication and interaction skills proved by taking part to International Scientific Conferences (Grecia – REV, IMCL; Austria – ICL; Egipt – REV; Spania – ICL; Finlanda – STE; Iaşi: ACME, EHB; Braşov – PRASIC, ICISIL; Târgu Mureş – INTER-ENG; Bucureşti – EHB; Chişinău – ICNBME) and Student Scientific Communication Sessions (Editions held on 2013, 2014, 2015, 2016, 2017), Contest and Exhibition of Final Projects in Front of Employers (Editions held on 2015, 2016, 2017, 2018, 2019, 2021, 2022, 2023, 2024) and by presenting different university projects and preparing for school activities (in 2008 I was selected to the National Olympiad of the Romanian Language, organized in Botosani).



# Curriculum Vitae

Oana Andreea

Organisational / managerial skills	<ul> <li>2012 – 2015: Representative Student of undergraduates in <i>Medical Engineering</i> Bachelor Degree</li> <li>2015 – 2017: Representative Student of undergraduates in <i>Mechatronic Systems for Industry and Medicine</i> Master Degree. This role is associated with the following abilities:         <ul> <li>Organizational and problem-solving skills;</li> <li>Teamwork skills;</li> <li>Decision making skills;</li> <li>Willing to work hard in order to finish successfully a task;</li> <li>Taking the responsibilities for my own actions;</li> <li>Receptiveness to suggestions and advice from my colleagues;</li> <li>Conscientiousness in fulfilling a given task.</li> </ul> </li> </ul>					
Digital competence	CE SELF-ASSESSMENT					
	Information processing	Communication	Content creation	Safety	Problem solving	
	Independent	Independent	Independent	Independent	Independent	
	Levels: Basic user - Inde Digital competences - Se	ependent user - Proficient elf-assessment grid	tuser			
Certificate No. 18-CTFL-1442-SEETB - ISTQB Certified Tester, Foundation Lo Contents (Syllabus version – 2011) Date: 13.11.2018 Fundamentals of Testing Testing design techniques Testing throughout the software life cycle Test Management Static techniques Tools support for Testing						
	National Instruments Certified LabVIEW Associate Developer Serial Number: 100-316-16867; Issue Date: 22.12.2016; Expiration Date: 21.12.2018 This certificate proves a basic knowledge and general experience regarding the development of applications using LabVIEW graphical programming environment.					
European Computer Driving Licence C Date: 14.03.2011 Serial number: RO 065413 This certificate proves the following digital competences and ab Module 1: Basic Concepts of Information Tec Module 2: Using the Computer and Managir Module 3: Word Processing Module 4: Spreadsheets Module 5: Database Module 5: Presentations Module 5: Information and Communicat				3 nd abilities of using a ca n Technology anaging Files g	omputer:	
	Certificate No. 23-CTAuT-222278-01 SEETB - ISTQB Certified Tester, Foundation Level Syllabus Automotive Software Test (CT-AuT) 2.0 Date: 11.02.2023 Introduction and Context in Testing of software-based Systems ISO 26262, Automotive SPICE ® and AUTOSAR Test Essentials Testing in virtual environments (especially MiL, SiL and HiL) Special static and dynamic test techniques complementary to ISTQB ® Foundation Level					
Digital competence	Basic programming kn 21 <sup>st</sup> February – 27 <sup>th</sup> Jur TechAdviser Academy Attending the below Co 10 <sup>th</sup> January 2024: Cer 05 <sup>th</sup> August 2023: Certi	vledge: AutoCAD, CATIA owledge: C/C++ language ne 2018: attending the C	ge, Java, Javascript, H isco Course <i>IT Essenti</i> zed by Digital Nation, c ava Basic/Survivor Lev wascript Intermediate/A	FML, CSS, PHP Fals PC Hardware and S Juring Tech Generation rel Ndventurer Level		



Oana Andreea

- Areas of interest Brain-Computer Interface, artificial Intelligence, high technology, smart devices, computer aided design, physics, optics, holography, augmented reality, psychopedagogy, psychology, philosophy, personal development, emotional intelligence, literature, science fiction, religion Orthodox Christian.
  - Hobby
     Development of LabVIEW based interactive simulations with a friendly user-interface

     Artistic drawing (different portraits and Bible Images of Saints)
     Reading (favourite domains: personal development, science and technology, religion, philosophy)

     Watching motivational and inspirational movies
     Cycling, roller skating, ice skating, riding by electric scooter, travelling.

#### ADDITIONAL INFORMATION

Awards

The Special Prize offered by Preh Romania to the "Student Projects in Mechatronics National Contest", organized in May 2017 as a section of "Mechatronics Education Days" annual Event The Special Prize offered by National Institute for Mechatronics and Measurement Technique from Bucharest, Romania to the "Student Scientific Communications National Session", organized in May 2017 as a section of "Mechatronics Education Days" annual Event

**The Second Prize** to the "Student Scientific Communications National Session", organized in May 2017 as a section of "Mechatronics Education Days" annual Event

The Big Prize to the "Graduates in front of companies" Conference, organized in May 2017 by Transilvania University of Brasov, Romania

**The First Prize** to the "Graduates in front of companies" Conference, "Medical Engineering, Medicine, Physical Education and Mountain Sports" Section, organized in May 2017 by Transilvania University of Brasov, Romania

**The First Prize** to the "Student Scientific Communications Session", Mechatronics Section, organized in April 2017 by Product Design and Environment Faculty, Transilvania University of Brasov

The Second Prize to the "Student Scientific Communications Session", Mechatronics Section, organized in April 2016 by Product Design and Environment Faculty, Transilvania University of Brasov

The "Virgil Olariu" Excellence Prize to the "Student Scientific Communications Session", Medical Engineering Section, organized in May 2016 by Product Design and Environment Faculty **The First Prize** to the "Graduates in front of companies" Conference, "Medical Engineering, Medicine, Physical Education and Mountain Sports" Section, organized in May 2015 by Transilvania University of Brasov, Romania

The "Virgil Olariu" Excellence Prize to the "Student Scientific Communications Session", Medical Engineering Section, organized in April 2015 by Product Design and Environment Faculty The First Prize to the "Student Scientific Communications Session", Medical Engineering Section, organized in April 2014 by Product Design and Environment Faculty

**The Third Prize** to the "Student Scientific Communications Session", Optometry Section, organized in May 2013 by Product Design and Environment Faculty

#### Projects

**PhD related Project – 2024:** "A Brain-Computer Interface Application Based on P300 Evoked EEG Potentials for Enabling the Communication Between Users and Chat GPT"

**PhD related Project – 2023:** "A LabVIEW Based Brain-Computer Interface Application for Controlling a Virtual Robotic Arm Using the P300 Evoked Biopotentials and the EEG Bandpower Rhythms Acquired from the GTEC Unicorn Headset"

**PhD related Project – 2022:** "A Brain-Computer Interface-Based Simulation of Vending Machine by the Integration Between Gtec Unicorn EEG Headset and LabVIEW Programming Environment Using P300 Speller and UDP Communication"

**PhD related Project – 2021:** "LabVIEW application aimed for designing a brain-computer interface composed of a mobile robot and a robotic arm, both based on NI myRIO system and controlled by the voluntary eye-blinks detected across the electroencephalographic signal acquired from NeuroSky"

PhD related Project – 2020: "Python applications with graphical user-interface for the implementation of Brain-Computer Interface systems enabling the EEG data acquisition from both Neurosky and Emotiv Insight headsets, allowing processing and classification of voluntary eyeblinks and the transmission of commands to the Raspberry Pi board by using Websockets protocol"
PhD related Project – 2019: "LabVIEW instrument aimed for the acquisition, processing and classification of EEG signals used in the implementation of a Brain-Computer Interface system"
PhD related Project – 2018: "Virtual Keyboard controlled by Eye-Blinks using NeuroSky Headset"
Master Thesis - 2017: "A LabVIEW based application for a Brain-Computer Interface using the NI myRIO system and the NeuroSky Mindwave Headset"



**Curriculum Vitae** 



NI Days 2016 Project: "3D Interactive Models developed in LabVIEW" Bachelor Project - 2015: "Design and Implementing some LabVIEW based virtual instruments of a Brain-Computer Interface for interactive simulations in Medical Engineering"

Student Scientific Communications Session 2016 - Medical Engineering Project: "The assistance of people with disabilities by gestures controlled 3D robot arm developed in LabVIEW" Student Scientific Communications Session 2016 – Mechatronics Project: "The interfacing between Arduino Platform and LabVIEW graphical programming environment" Student Scientific Communications Session 2013 – Optometry Project: "Holography – a modern perspective of optics regarding the various applications"

Activities

Teaching – Laboratory: "Virtual Instrumentation" (software applications in NI LabVIEW), under coordination of Prof. Dr. Eng. Petru Adrian COTFAS, during first semester of 2021/2022, 2022/2023 university years, both first and second semesters of 2023/2024 university year

Teaching – Laboratory: "Medical Informatics" (software applications in Microsoft Access), "Artificial Intelligence" (software applications in Matlab) and "Microcontrollers and Microprocessors", under coordination of Prof. Dr. Eng. Marius Cristian LUCULESCU, during first semester of 2018/2019, 2019/2020 and 2020/2021 university years

Presenting a personal PhD project to the "Graduates in front of Companies" Conference – Doctorate Section – 2021 Edition

Presenting a personal PhD project to the "Graduates in front of Companies" Conference – Doctorate Section – 2019 Edition

Presenting a personal PhD project to the "Graduates in front of Companies" Conference – Doctorate Section – 2018 Edition

Exhibitor in the European Researchers' Night 2017, event that took place at the National College Andrei Şaguna from Brasov

Presenter in the National Instruments Days 2016, annual event organized in Bucharest Presenting my project to the "Graduates in front of Companies" Conference – 2016 Edition Interregional Seminar – POSDRU 160/2.1/S/133020 – organized in June 2015 to the Transilvania University of Brasov Romania – presenting the theme: "Growing the capacity to integrate students and graduates in the working field by counselling and practical placements"

**Television Presentation** to the "Today in Brasov", broadcasted in May 2017 on the local TV channel "RTT". The Vice-Rector of Transilvania University of Brasov invited me to offer more information about my successful project, awarded with" The Big Prize" to the "Graduates in front of Companies" Conference – 2017 Edition

**Short Interview to the "Student Show"**, broadcasted in May 2016 on the local TV channel "Nova TV". I presented a brief description of my project prepared for "Graduates in front of Companies" Conference – 2016 Edition.

**Short Television Interview to the "Student Show**", broadcasted in May 2014 on the local TV channel "Nova TV". The discussed theme was related to a description about Product Design and Environment Faculty from University Transilvania of Brasov, Romania.

**Paper published in the "Annual volume of student scientific research"** – edited in 2014 by Transilvania University of Brasov, Romania

#### **Scientific Articles**

- Single-author to the paper entitled A LabVIEW Instrument Aimed for the Research on Brain-Computer Interface by Enabling the Acquisition, Processing, and the Neural Networks based Classification of the Raw EEG Signal Detected by the Embedded NeuroSky Biosensor, ISI indexed and published to The International Journal of Online and Biomedical Engineering, 19(05), pp. 57-81, Impact Factor=1.7.
  - Single-author to the paper entitled A Fuzzy Logic-Based LabVIEW Implementation Aimed for the Detection of the Eye-Blinking Strength Used as a Control Signal in a Brain-Computer Interface Application, ISI indexed and published to The 15<sup>th</sup> International Conference Interdisciplinary in Engineering, 7 – 8 Octombrie 2021, Târgu Mureş.
  - Single-author to the paper entitled The Development of a Brain-Computer Interface for Controlling a Robotic Arm and a Mobile Device by Using the Voluntary Eye Blinking, ISI indexed and published to The 9<sup>th</sup> International Conference on E-Health and Bioengineering – EHB 2021, 18 – 19 November 2021, Iaşi.
  - 4. First-author to the paper entitled LabVIEW and Android BCI Chat App Controlled By Voluntary Eye-Blinks Using NeuroSky Mindwave Mobile EEG Headset, ISI indexed and published to The E-Health and Bioengineering Conference, 29 30<sup>th</sup> October 2020, Iași.
  - First-author to the paper entitled Experimental Model of a Robotic Hand Controlled by Using NeuroSky Mindwave Mobile Headset, ISI indexed and published to The IEEE E-Health and Bioengineering Conference – EHB 2019, 21-23<sup>rd</sup> 'November 2019, Iaşi, România
  - 6. First-author to the paper entitled Simulation of a BCI System Based on the Control of a





Robotic Hand by Using Eye-blinks Strength, ISI indexed and published to The IEEE Ehealth and Bioengineering Conference – EHB 2019, 21-23<sup>rd</sup> 'November 2019, Iași, România

- 7. First-author to the paper entitled A brain-computer interface based on the integration of NI myRIO development device and NeuroSky Mindwave headset, ISI indexed and published in the IOP Conference Series: Materials Science and Engineering Volume 444, Proceedings of 8<sup>th</sup> Int. Conf. on Advanced Concepts in Mechanical Engineering, 2018, Iaşi.
- First-author to the paper entitled A LabVIEW Application Implemented for Simulating the Working Principle of the Brain-Computer Interface, BDI indexed and published to The 19<sup>th</sup> International Conference on Remote Engineering and Virtual Instrumentation, 2023, Egipt.
- 9. First-author to the paper entitled A LabVIEW Based Brain-Computer Interface Training Environment by Controlling Yoda Holograms Using Eye-Blinks According to an Interactive Game Framework, BDI indexed and published to The 25<sup>th</sup> International Conference on Interactive Collaborative Learning (ICL), 27 – 30 September 2022, Austria.
- 10. Single-author to the paper entitled A LabVIEW Based Brain-Computer Interface for Accessing the Internet Resources by Using the Unicorn EEG Headset and the P300 Speller Board, BDI indexed and published to The 26<sup>th</sup> International Conference on Interactive Collaborative Learning (ICL), 26 – 30 September 2023, Spain.
- 11. Single-author to the paper entitled The Development of Brain-Computer Interface Applications Controlled by the Emotiv Insight Portable Headset Based on Analyzing the EEG Signals Using NODE-Red and Python Programming Software Tools, BDI indexed and published to The 20<sup>th</sup> Int. Conf. on Remote Engineering and Virtual Instrumentation, 2023.
- 12. Single-author to the paper entitled A Brain-Computer Interface Application Based on P300 Evoked EEG Potentials for Enabling the Communication Between Users and Chat GPT, BDI indexed and published to The Interactive Mobile Communication, Technologies and Learning (IMCL), 9 – 10 November, 2023, Thessaloniki, Greece.
- 13. Single-author to the paper entitled A Brain-Computer Interface for Controlling a Wheelchair Based Virtual Simulation Using the Unicorn EEG Headset and the P300 Speller Board, BDI indexed and published to The 21<sup>st</sup> International Conference on Smart Technologies & Education, 5 7 Martie, 2024, Helsinki, Finland.
- 14. Co-author to the paper entitled Energy and Mechatronics Applications based on NI myRIO, published in the BDI indexed Journal related to International Conference on Control Engineering and Mechanical Design (CEMD 2017), China.
- 15. Single-author to the paper entitled Python Implementation for Brain-Computer Interface Research by Acquiring and Processing the NeuroSky EEG Data for Classifying Multiple Voluntary Eye-Blinks, BDI indexed and published to The 5<sup>th</sup> International Conference on Nanotechnologies and Biomedical Engineering (ICNBME), 3 – 5 November 2021, Chişinău.
- 16. Single-author to the paper entitled A Brain-Computer Interface for Controlling a Mobile Assistive Device by Using the Neurosky EEG Headset and Raspberry Pi, BDI indexed and published to The 5<sup>th</sup> International Conference on Nanotechnologies and Biomedical Engineering (ICNBME), 3 – 5 November 2021, Chişinău.
- 17. Single-author to the paper entitled LabVIEW Instruments for Creating Brain-Computer Interface Applications by Simulating Graphical Animations and Sending Text Messages to Virtual and Physical LEDs Based Display Systems Connected to Arduino Board, BDI indexed and published to The 10<sup>th</sup> International Conference on Advanced Concepts in Mechanical Engineering (ACME), 9 – 10 June 2022, Iași.
- 18. Single-author to the paper entitled A Python-based Brain-Computer Interface Application for Controlling an Intelligent House by Using Emotiv Insight EEG Headset and Arduino Mega Development Board, BDI indexed and published to The E-Health and Bioengineering Conference (EHB), 17 – 18 November 2022, Iaşi.
- 19. Single-author to the paper entitled A LabVIEW Based Brain-Computer Interface Application for Controlling a Virtual Robotic Arm Using the P300 Evoked Biopotentials and the EEG Bandpower Rhythms Acquired from the GTEC Unicorn Headset, BDI indexed and published to The 6<sup>th</sup> International Conference on Nanotechnologies and Biomedical Engineering (ICNBME), 20 – 23 September 2023, Chişinău.
- 20. Single-author to the paper entitled A Brain-Computer Interface-Based Simulation of Vending Machine by the Integration Between Gtec Unicorn EEG Headset and LabVIEW Programming Environment Using P300 Speller and UDP Communication, BDI indexed and published to The 16<sup>th</sup> International Conference Interdisciplinarity in Engineering (INTER-ENG), 6 – 7 October 2022, Târgu Mureş.
- 21. First-author to the paper entitled Virtual robot arm controlled by hand gestures via Leap Motion Sensor, BDI indexed and published to The Product Design, Robotics, Advanced Mechanical and Mechatronic Systems and Innovation Conference, 2018, Braşov.
- 22. First-author to the paper entitled Virtual keyboard based on a brain-computer interface, BDI indexed and published to The Product Design, Robotics, Advanced Mechanical and Mechatronic Systems and Innovation Conference, 2018, Braşov.





- 23. First-author to the paper entitled Arduino based mobile robot controlled by voluntary eye-blinks using LabVIEW GUI & NeuroSky Mindwave Mobile Headset, BDI indexed and published to The 9<sup>th</sup> International Conference on Advanced Concepts in Mechanical Engineering, ACME, 4 5 June, 2020, Iași.
- 24. Single-author to the paper entitled A P300 Based Brain-Computer Interface LabVIEW Instrument for Controlling an Experimental Prototype of Juices Vending Machine Using the Unicorn EEG Headset, BDI indexed and published to the The 17<sup>th</sup> International Conference Interdisciplinarity in Engineering, INTER-ENG 2023, Târgu-Mureş.
- 25. Single-author to the paper entitled The development of a BCI prototype on the integration between NeuroSky Mindwave Mobile EEG headset, Matlab software environment and Arduino Nano 33 IoT board for controlling the movement of an experimental motorcycle, BDI indexed and published to The 11<sup>th</sup> International Conference on Information Science and Information Literacy, ISICIL 2021, Braşov.
- 26. Single-author to the paper entitled A LabVIEW and P300 Speller based Brain-Computer Interface for Controlling a Robotic Arm and a Mobile Robot by Using the GTEC Unicorn Headset, BDI indexed and published to The 11<sup>th</sup> International Conference on e-Health and Bioengineering (EHB), 9 – 10 November 2023, București.
- 27. Single-author to the Preprint Paper entitled Advanced LabVIEW Applications Aimed for the Acquisition, Processing and Classification of the Electroencephalographic Signals Used in a Brain-Computer Interface System.
- 28. Single-author to the Preprint Paper entitled A LabVIEW Instrument Aimed for the Research on Brain-Computer Interface by Enabling the Acquisition, Processing, and the Neural Networks based Classification of the Raw EEG Signal Detected by the Embedded NeuroSky Biosensor.
- Single-author to the paper entitled A P300-based Brain-Computer Interface to Control a 3D LabVIEW Simulation using GTEC Unicorn P300 Speller Aimed at Cognitive Training, submitted to The International Conference on User-System Interaction, 19 – 20 September, Constanța.

Prezentare - Aplicație BCI pt. control motocicleta prin integrarea NeuroSky EEG & Arduino Nano IoT33 - https://youtu.be/AZHdEyMRwQM

Prezentare - Aplicație BCI pt. control robot mobil prin integrarea Neuronal EEG & Raspberry Pi - <u>https://youtu.be/CwffHmnHQsY</u>

Prezentare – Aplicație BCI pt. control mana robotica prin integrare NeuroSky EEG & Arduino Uno https://youtu.be/owUD7IFci2A

Prezentare Generala - Aplicatii Casca EEG Emotiv Insight -Integrare cu Micro:Bit in mediul Node-Red - <u>https://youtu.be/dD8oHnX6DCk</u>

Unicorn P300 Speller based Brain-Computer Interface for Controlling 3D Wheelchair in LabVIEW https://youtu.be/I0Uyr3EHstg

P300 Based BCI for Controlling 3D Wheelchair in LabVIEW Virtual Environment -

https://youtu.be/\_KIFKc8NPp8

A Brain-Computer Interface based on P300 EEG for Enabling Communication between Users and Chat GPT - <u>https://youtu.be/ArLytlKK0D0</u>

LabVIEW Brain Computer Interface Prototype Integrated with GTEC P300 Unicorn Speller - Control Juice - <u>https://youtu.be/znAB3j8UIUY</u>

Experimenting BCI to Access Internet Resources by Using the Unicorn EEG Headset and the P300 Speller - <u>https://youtu.be/yt-3crPVXk0</u>

A LabVIEW BCI to Access the Internet Resources by Using the Unicorn EEG Headset and the P300 Speller - <a href="https://youtu.be/YiSKKYI3C80">https://youtu.be/YiSKKYI3C80</a>

LabVIEW Interface for Gtec Unicorn EEG Headset - https://youtu.be/jaQDuvpRkYk

AFCO 2023 Doctorat - LabVIEW Interface for GTEC Unicorn EEG Headset to Control Juice Vending Machine - <u>https://youtu.be/1NnAQwQFIzU</u>

LabVIEW Interface for the GTEC Unicorn EEG Headset to Control an Experimental Juice Vending Machine - <u>https://youtu.be/dyOEfS4lhQA</u>

Node-Red based Brain-Computer Interface Using LabVIEW Experimental Setup and Micro:Bit Board - https://youtu.be/3\_FIn9Z1Eac

BCI Demonstration Using EmotivPRO EEG Software and an Automatic LabVIEW Experimental Setup - <u>https://youtu.be/PTi2KcypIF4</u>

Demonstration - BCI Unicorn Headset with Matlab & Simulink Interface for EEG Signals Acquisition - <u>https://youtu.be/bRKHowc0rtE</u>

A BCI For Controlling A Mobile Assistive Device By Using The NeuroSky EEG Headset And Raspberry Pi 4 - <u>https://youtu.be/clmOpV\_Dc1g</u>

A LabVIEW App Implemented for Simulating the Working Principle of the Brain-Computer Interface - <a href="https://youtu.be/b4POGPIYPOA">https://youtu.be/b4POGPIYPOA</a>

YouTube Unlisted Links Video Demonstrations Own Original Applications



Oana Andreea F

Simulation of a BCI system based on the control of a 3D robotic hand by using eye-blink strength https://youtu.be/b5CM-8obahU

Virtual Keyboard controlled by Eye Blinks Strength using NeuroSky Mindwave Headset - <u>https://youtu.be/ZxfemURZx10</u>

LabVIEW Apps aimed for the Acquisition, Processing and Classification of EEG Signals in a BCI System - <u>https://www.youtube.com/watch?v=bmr04-QKJOg</u>

Real-Time LabVIEW App for the acquisition, feature extraction and classification of Raw EEG in a BCI - <u>https://youtu.be/NkzBY3Ftt51</u>

LabVIEW & NI myRIO based BCI for controlling a Robotic Arm by Voluntary Eye-Blinks from NeuroSky - <u>https://youtu.be/IlljaHYQUqw</u>

Matlab & Arduino based BCI for Controlling a Motorcycle By Voluntary Eye-Blinks from NeuroSky Sensor - <u>https://youtu.be/dS\_MLjAUy2Q</u>

Arduino based Mobile Robot controlled by Eye Blinks after applying Fuzzy Logic to Raw EEG in LabVIEW - <u>https://youtu.be/Mh9ibydqd5w</u>

LabVIEW and Android based Chat Application by using Voluntary Eye Blinks Detected from the NeuroSky - <u>https://youtu.be/wHYKHfo3k04</u>

Android Application developed in MIT App Inventor to simulate digit counting displayed by 7 Segments - <u>https://youtu.be/2dCd86nJc60</u>

Arduino & LabVIEW based Robotic Hand Controlled By Eye-Blinks Detected from the NeuroSky Biosensor - <u>https://youtu.be/ZKigJn26RDw</u>

Robotic Arm Controlled by Eye Blinks Strength Using NeuroSky Mindwave Headset and NI myRIO - <u>https://youtu.be/LzciNu-3Ftc</u>

A LabVIEW Based Brain-Computer Interface Game by Controlling Yoda Holograms Using Eye-Blinks - <u>https://youtu.be/80V7dLKDSYo</u>

LabVIEW Application for Creating LED Based Graphical Animations By Using a Brain-Computer Interface - <u>https://youtu.be/6ffVZoxKTyY</u>

Controlling the Augmentative and Alternative Communication System by Using Brain-Computer Interface - <u>https://youtu.be/HZGMh46-6kw</u>

A LabVIEW based 3D virtual robotic arm designed in LabVIEW and controlled by using the smartphone - <a href="https://youtu.be/bKRdb5Eyf7M">https://youtu.be/bKRdb5Eyf7M</a>

A LabVIEW-based 3D robotic arm designed in LabVIEW and controlled by the Arduino accelerometer - <a href="https://youtu.be/kYyVxDdEUZk">https://youtu.be/kYyVxDdEUZk</a>

A LabVIEW-based 3D robotic arm designed in LabVIEW and controlled by gestured captured by Webcam - <a href="https://youtu.be/EkExmLlf\_qk">https://youtu.be/EkExmLlf\_qk</a>

Enhanced LabVIEW Instrument - A virtual 3D robotic arm designed and manually controlled in LabVIEW - <u>https://youtu.be/PIZCCXgSlyg</u>

LabVIEW Instrument - A virtual 3D robotic arm designed and manually controlled in LabVIEW https://youtu.be/ws8VWvek1KA

LabVIEW Simulation - A 3D virtual robotic hand designed and controlled in LabVIEW https://youtu.be/1Dyb88vlpwA

CAD Model - A 3D robotic hand designed and controlled in CATIA - <u>https://youtu.be/ZeBFnQr5MIA</u> Simulation of a BCI system based on the control of a 3D robotic hand by using eye-blink strength - <u>https://youtu.be/b5CM-8obahU</u>

LabVIEW Simulation of a Brain-Computer Interface - https://youtu.be/rolPofa9SWg

LabVIEW Apps - Brain Computer Interface; Graphical Text Display; Medical Electronic Prescriptions - <u>https://youtu.be/goZcTKLb2Ys</u>

LabVIEW Virtual Instrument - Smart Display & Chronometer - 2x16 Characters (Led Matrices) https://youtu.be/QtmVEnSPIYs

LabVIEW Virtual Instrument - Smart Display & Text Messages - 2x16 Characters (Led Matrices) https://youtu.be/dw7K9r1yhnw

LabVIEW Graphical User Interface & Arduino LED Matrix with Max7219 Driver - Animated Graphic Effects - <u>https://youtu.be/spVPJmk5irM</u>

Arduino & MIT App Inventor Apps - Animated Graphic Effects displayed on 8x8 Led Matrix with Max7219 - <u>https://youtu.be/g5U4qnM-wTw</u>

Practical placement

September 2014 – Saint Constantin Hospital of Brasov, Romania August 2014 & July 2013 – County centre of Medical equipment of Brasov, Romania July 2014 – Oncological Diagnostic and Treatment Centre of Brasov, Romania