Curriculum vitae Europass

Personal information

Surname / First name	**ALBIȚA, Anca**
Address	Craiova, Dolj, România
E-mail	anca.albita@edu.ucv.ro , anca.albita@gmail.com
Nationality	Romanian
Date of birth	15.10.1986
Gender	F

Work experience

Dates	November 2021 – present
Occupation or position held	Lecturer (01.10.2024 – present)
	Teaching Assistant (01.11.2021 – 30.09.2024)
Main activities and responsibilities	*Teaching activity* in the subjects

- Internet of intelligent devices (lectures, laboratory and project work)
- Embedded systems for process monitoring (lectures and laboratory work)
- Data acquisition systems and process interfaces (laboratory work)
- Object oriented programming (laboratory work)
- Applied Informatics II (laboratory work)

Research activity domains

- Applied informatics
- IIoT (Industrial Internet of Things)
- Monitoring and data acquisition systems for industrial environment
- Hardware design for process monitoring and data acquisition interfaces

Name and address of employer	University of Craiova, A.I. Cuza Street, no. 13, 200585, Craiova, Romania
Type of business or sector	*Higher education and research*:
	University of Craiova, Faculty of Automation, Computers and Electronics, Department of Automatic Control and Electronics

Dates	2023 – present (part-time)	2009 – 2023 (full-time)	2004 – 2009 (part–time)
Occupation or position held	Research engineer in Computers (according to the Classification of Occupations in Romania 251414)		Informatician
Main activities and responsibilities	Design and implementation of software applications for computers, embedded systems, systems with microcontrollers, hardware design using VHDL for customized data acquisition system interfaces with FPGAs		Software application programming and operation
Name and address of employer	VIG IMPEX Ltd., Ștefan cel Mare Street, no. 12, Craiova, Romania		
Type of business or sector	Research, design and development of systems and software applications for industrial environments		

Dates	December 2017 – August 2021
Occupation or position held	*Research assistant* in industrial energy, COR 215147

Main activities and responsibilities	Research and Development : • Application software for data acquisition systems, • Application software for microprocessor and microcontroller systems, • Customized software applications for embedded systems
Name and address of employer	VIG IMPEX Ltd., Craiova (Ștefan cel Mare Street, no. 12, Craiova, Romania) – partner at POC grant, code *SICSC-GC, ID P_40_387, Cod SMIS 106020*, from 2016-2021, won through competition by University of Craiova
Dates	February – July 2021
Occupation or position held	*Associate teaching staff* (Teaching assistant)
Main activities and responsibilities	Conducting laboratory work at subject *Data acquisition systems and process interfaces*
Name and address of employer	University of Craiova, A.I. Cuza Street, no. 13, Craiova, Romania
Type of business sector	Teaching activity – Faculty of Automation, Computers and Electronics, Department of Automatic Control and Electronics

Education and training

Dates	October 2020 – October 2023
Title of qualification awarded	*Ph.D. in Systems Engineering*
Main subjects studied / professional skills acquired	Thesis topic: *Monitoring and data acquisition systems for industrial environment, with local or remote network communication* PhD advisor: *Prof. dr. eng. Dan Selișteanu* Public thesis defense – October 9, 2023 Exams / Projects / Research reports and skills in in the field of Systems Engineering
Name and type of organization providing education and training	University of Craiova, Faculty of Automation, Computers and Electronics – "Constantin Belea" Doctoral School
Dates	October 2020 – July 2021
Title of qualification awarded	*Graduation diploma of postgraduate studies in the field of "Educational Sciences", Psychopedagogical Training Program, Level I,* full-time education
Name and type of organization providing education and training	University of Craiova, Department for Teaching Staff Training
Dates	October 2020 – July 2021
Title of qualification awarded	*Graduation diploma of postgraduate studies in the field of "Educational Sciences", Psychopedagogical Training Program, Level II,* full-time education
Name and type of organization providing education and training	University of Craiova, Department for Teaching Staff Training
Dates	October 2009 – July 2011
Title of qualification awarded	*Master* *Master's degree* in Systems Engineering, Programme of studies: *Tehnologii informatice în ingineria sistemelor (Informatics Technologies in Systems Engineering)* Dissertation exam average: 10 Overall average grade: 9,96
Main subjects studied / professional skills acquired	*Main subjects studied* Software structures for real-time applications, Advanced numerical signal processing techniques, Communication systems and networks, Networked control systems, Geographical computer systems
Name and type of organization providing education and training	University of Craiova, Faculty of Automation, Computers and Electronics
Dates	October 2005 – July 2009
Title of qualification awarded	*Engineer* *Bachelor's degree* in *Computers and Information Technology, Computers specialization* Bachelor exam average: 10 Overall average grade: 9,50

Main subjects studied / professional skills acquired	*Main subjects studied* Computer programming, Object oriented programming, Assembly language programming, Digital integrated circuits, Operating systems, Computer structure and organization, Microprocessors systems design, Computer networks, Network distributed application development, Data security, Real-time computing systems, Embedded systems, VLSI environments.
Name and type of organization providing education and training	University of Craiova, Faculty of Automation, Computers and Electronics
Dates	September 2001 – July 2005
Title of qualification awarded	*High school diploma*, June-July 2005 session Baccalaureate exam average: 9,60
Name and type of organization providing education and training	"Carol I" National College, Craiova, România Theoretical branch, Sciences profile, *Mathematics and Computer science, Intensive English*

Personal skills and competences

Mother tongue	Romanian

Other languages

Self-assessment

European level (*)

	Understanding			Speaking					Writing	
	Listening		Reading		Spoken interaction		Spoken production		Written expression	
English language	B2	Independent user	B2	Independent user	B2	Independent user	B2	Independent user	B2	Independent user
French language	B1	Independent user	B1	Independent user	B1	Independent user	B1	Independent user	B1	Independent user

(*) Common European Framework of Reference for Languages

Language proficiency certificate for level B2 - English language, no. 1654 / 07.09.2020, from *Interlingua Centre for Modern Languages* - University of Craiova

Social skills and competences	Teamwork skills, interpersonal and group communication skills, creativity (teaching activity, participation in conferences, company activity).
Organizational skills and competences	▪ The ability to analyze, synthesize and organize, the ability to make decisions, the ability to coordinate, teaching skills (teaching activity), project manager with VIG IMPEX, Ltd. ▪ Local organizing committee member at SIITME-2023, and ICSTCC-2024 international conferences
Technical skills and competences	• Development of edge and IoT edge customized software solutions for data acquisition systems • Software applications of remote command and communication through IIoT infrastructures for electrical signal monitoring systems • Hardware description languages for FPGA design (VHDL) • Software applications for embedded systems • Software applications for data acquisition systems, real-time process monitoring and control • Software applications for parameter recording of fast transient regimes in the power industry, and post-recording analysis of these phenomena
Computer skills and abilities	➢ Operating systems (Windows, Linux, FreeDOS) ➢ Programming tools and environments (assembly languages for microprocessors and microcontrollers, C programming language, microcontroller C programming language , C++ programming language, Python, Visual Studio) ➢ Hardware design with Vivado IDE ➢ Software applications for data acquisition systems, fast transient event recording and analysis systems, monitoring and control systems for industrial processes with local or remote network communication ➢ Web applications ➢ LabView programming environment applications ➢ Use of software packages for text editing and document development

Additional information

Scientific research grants

As a member of the research team of the Department of Automatic Control and Electronics:
1. Research project no. 6/15.03.2023 – <u>national competition</u>, Topic: *Implementation of control strategies at the dsPIC family signal multiprocessor level, intended for electric drives (Implementarea strategiilor de control la nivelul multiprocesoarelor de semnal din familia dsPIC destinate acţionărilor electrice)*, Funder: INDAELTRAC SRL, Project mamager – Lecturer, PhD. Stîngă Florin, during 2023-2024.

As a software engineer of the VIG IMPEX team, between 2009-2024 I contributed to the achievement of several objectives within *6 scientific research grants* (*COMPETITIVENESS OPERATIONAL Program, NUCLEU Program, PARTNERSHIPS IN PRIORITY AREAS Program*) won through competition by the companies / institutions with which VIG IMPEX Ltd collaborated.
1. <u>*NUCLEU Program*</u>, project topic: *Technical solutions and equipment for condition monitoring and early fault diagnosis of backup power systems in high-voltage substations, in accordance with IEEE requirements (Soluții tehnice și echipament pentru monitorizarea stării și diagnoza defectelor incipiente aferente sistemelor de electroalimentare de rezervă din stațiile electrice de înaltă tensiune, în conformitate cu cerințele IEEE)*, Stage 05, 2024, grant won by National Institute for Research, Development and Testing in Electrical Engineering (ICMET) Craiova.
2. <u>*COMPETITIVENESS OPERATIONAL PROGRAM (PROGRAMUL OPERAŢIONAL COMPETITIVITATE - POC).*</u> Topic: *Intelligent solutions to increase security and competitiveness through monitoring, diagnosis, reducing unwanted energy effects and increasing energy efficiency in generation and industrial consumers (SICSC-GC)* (*Soluții inteligente de creșterea securității și competitivității prin monitorizare, diagnoză, reducerea efectelor energetice nedorite și creșterea eficienței energetice la generare și la consumatori industriali (SICSC-GC))*, during 2016-2021, grant won by the University of Craiova.
3. <u>*NUCLEU Program*</u>, PN project 18 25 02 01 with the topic *Increasing operational safety of overhead power lines and substations under predictable conditions, through continuous monitoring of specific parameters according to current market requirements (Creșterea siguranței în exploatare a liniilor electrice aeriene și a posturilor de transformare în condiții de predictibilitate, prin monitorizarea continuă a parametrilor specifici în concordanță cu cerințele actuale de piață)*, 2018, grant won by ICMET Craiova.
4. <u>*NUCLEU Program*</u>, CSEE 01 – PN 16 15 02 01 Project, with the topic *Increasing the competitiveness of power transformer monitoring and diagnostic systems developed at ICMET Craiova, according to current market requirements – Power transformer monitoring and diagnosis system (Creșterea competitivității sistemelor de monitorizare și diagnosticare a transformatoarelor electrice de putere dezvoltate la ICMET Craiova, în concordanță cu cerințele actuale de piață – Sistem de monitorizare și diagnosticare a transformatoarelor electrice de putere)*, 2017, grant won by ICMET Craiova.
5. <u>*PARTNERSHIPS IN PRIORITY AREAS Program,*</u> PC project category, Topic: *Medium voltage power quality monitoring equipment based on non-conventional measuring sensors in order to identify optimal compensation and filtering solutions (Echipament de monitorizare a calităţii energiei electrice la medie tensiune bazat pe senzori de măsură neconvenţionali în scopul identificării de soluţii optime de compensare şi filtrare)*, between 2007-2010, grant won by ICMET Craiova.
6. <u>*PARTNERSHIPS IN PRIORITY AREAS Program,*</u> CEEX project category, Contract no. 21059 / 14.09.2007, Topic: *Research on the development of ecological technologies based on magnetostrictive induced vibrations in order to reduce energy consumption that has the effect of global warming (Cercetări privind realizarea de tehnologii ecologice pe baza vibrațiilor induse magnetostrictiv în vederea reducerii consumurilor energetice ce au ca efect încălzirea globală)*, between 2007-2010, grant won by ICMET Craiova.

Diplomas and awards obtained

As a member of the research team of the Department of Automatic Control and Electronics:
1. **UEFISCDI award** *within* Program 5.2, Subprogram 5.2.3 – Research result awarding, Web *of* Science articles, Competiția 2023 pentru articole ISI din 2022, for the work
   Albița Anca, Selişteanu Dan, *A Configurable Monitoring, Testing, and Diagnosis System for Electric Power Plants*, Sensors 2022 (Q2-ISI Journal, Impact Factor: 3.9), 22(15), Art. No. 5618, pp. 1-28, eISSN:1424-8220, WOS:000839677600001.

As a member of the research team of VIG IMPEX Ltd Craiova, the following diplomas, medals or awards at International Research Exhibitions:
1. *Diploma of Achievement – Medal Inventica 2019*
   The XXIII-th International Exhibition of Inventics, INVENTICA 2019, Iași, Romania, 26-28 June 2019
2. *Diploma of Excellence and Gold Medal*
   International Salon of Scientific Research, Innovation and Invention PRO INVENT, XVII edition, Cluj-Napoca, Romania, 20-22 March 2019
3. *Diploma and Bronze Medal*
   The 12 Edition of European Exhibition of Creativity and Innovation EUROINVENT-2020, Iași, Romania, 21-22 May 2020
4. *Diploma and Gold Medal*
   The International Exhibition of Innovation and Technological Transfer – innoCENTA, Facullty of Mechanics, Politehnica University of Timișoara, Romania, 7-8 November 2024
5. *Diploma of Excellence and Gold Medal*
   The 1st International Exhibition on Innovation in Electrical and Power Engineering, Tulcea, Romania, 9-12 May 2024

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6. _Diploma and Gold Medal_
    The International Exhibition of Innovation and Technological Transfer – innoCENTA, Politehnica University of Timișoara, Timișoara, Romania, 6-7 November 2025.
7. _Diploma and Gold Medal_
    Technological Forum Oltenia TechFest, "Constantin Brâncuși" University of Târgu Jiu, Târgu Jiu, România, 6-7 November 2025
8. _AGIR 2012 award_, in the field of Electrical Engineering, awarded to the National Institute of Research - Development and Testing for Electrotechnics ICMET Craiova for the paper _Microprocessor structure for monitoring and protection of power transformers – IMT 02 SE (Echipament cu microprocesor pentru monitorizarea și protecția transformatoarelor de putere – IMT 02 SE)_, developed in collaboration with VIG Craiova Ltd.
    The award was given by _General Association of Romanian Engineers_ on 6 September 2013.

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Published works and Inventions

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Published papers

- Books published by CNCS recognized publishers 2
- Articles published in specialized journals ISI indexed (Q2) 2
- Articles published in specialist journals BDI indexed …….. 11
    (of which 6 articles in Scopus indexed journals)
- Articles published in international conference volumes ISI indexed …………………….... 17
- Articles published in international conference volumes BDI indexed ……………………… 4

                                      Total of 36 published papers

Scientific papers presented at national scientific events …….. 3

Inventions

Patent application (Brevet de invenție) No.133444, issued by State Office for Inventions and Trademarks, pe 30.12.2020
- Applicant: National Institute of Research - Development and Testing for Electrotechnics (ICMET), Craiova
- Topic: _Monitoring method and system for the sag of overhead power transmission lines conductors (Metodă și sistem de monitorizare a săgeții cablurilor liniilor electrice aeriene)_
- Inventors: Sacerdoțianu Dumitru, Nicola Marcel, Vintilă Adrian, Nicola Claudiu, Hurezeanu Iulian, Lăzărescu Florica, Popescu Paul, Purcaru Ion, **Albița Anca**

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Lecturer, Ph.D. Eng. ALBIȚA Anca