



Europass Curriculum Vitae



Informații personale

Nume / Prenume **BORZA PAUL NICOLAE**
Adresă
Telefon Mobil:
Fax 0268-3228082
E-mail borzapn@unitbv.ro;
Naționalitate Română
Data nașterii
Sexul Masculin

Domeniul ocupational

Inginerie Electrică

Experiența profesională

Perioada	10/2001 → prezent
Funcția sau postul ocupat	Abilitare in Inginerie electrica 2018
Activități și responsabilități principale	Profesor
Angajatorul	Universitatea Transilvania din Brasov Str. Eroilor, Nr. 29, 500036(Romania)
Perioada	09/2002-05/2009
Tipul activității	de cercetare
Funcția sau postul ocupat	Director de echipă Energy & Information; Membru Siemens AG
Activități și responsabilități principale	Cercetător și Director
Angajatorul	Siemens Program and System Engineering Brasov
Perioada	10/1996-10/2001
Funcția sau postul ocupat	Conferențiar
Angajatorul	Universitatea Transilvania din Brasov Str. Eroilor, Nr. 29, 500036(Romania)
Activități și responsabilități principale	
Perioada	10/1991-10/1996
Funcția sau postul ocupat	Șef de lucrări

Activități și responsabilități principale

Angajatorul

Universitatea Transilvania din Brasov
Str. Eroilor, Nr. 29, 500036(Romania)

Perioada **9/1982-10/1991**

Funcția sau postul ocupat Asistent universitar

Activități și responsabilități principale

Angajatorul

Universitatea Transilvania din Brasov
Str. Eroilor, Nr. 29, 500036(Romania)

Educație și formare

Perioada **1990-1994**

Titlul certificatului sau diplomei obținute Diploma de Doctor în științe, domeniul: Bioinginerie

Discipline principale / abilități profesionale Contribuții la dezvoltarea aparaturii de măsurare a influenței informațiilor asupra organismelor vii

Instituția de învățământ/furnizorul de formare

Universitatea "Politehnica" din București

Perioada **1975-1980**

Titlul certificatului sau diplomei obținute Diploma de Inginer în Inginerie Electrică

Discipline principale / abilități profesionale Inginerie Electrică, Știința Calculatoarelor

Instituția de învățământ/furnizorul de formare

Universitatea Transilvania din Brasov
Str. Eroilor, Nr.29, 500036 (Romania)

Competențe personale

Limba maternă **Română**

Limbile străine **Franceză, Engleză, Germană**

Autoevaluare
European level ()*

French

English

German

Înțelegere				Vorbire				Scriere	
Ascultare		Citire		Conversație		Discurs oral			
C1	Utilizator experimentat	C2	Utilizator experimentat	C1	Utilizator experimentat	C1	Utilizator experimentat	C1	Utilizator experimentat
C1	Utilizator experimentat	B2	Ut. independent	C1	Utilizator experimentat	B2	Ut. independent	B2	Ut. independent
B2	Ut. independent	B2	Ut. independent	B2	Utilizator experimentat	B2	Ut. independent	B2	Ut. independent

(*) [Cadrul European comun de referință pentru limbi străine](#)

Competențe și abilități sociale.

Munca în echipă
Abilități de mediere
Experiența interculturală
Sociabil
Flexibilitate

Competențe și aptitudini tehnice.

Inginerie electrică, Dispozitive de stocare a energiei, Proiectarea circuitelor, Programarea microcontroler-elor, Inteligență artificială, Dispozitive medicale

Competențe și competențe informatice.

Microsoft Office (Word, Excel, PowerPoint), Matlab, MathCAD, Basic, C++, OrCad, s.a.

Alte abilități și competențe.

cursuri Siemens Engineering Methods, (SEM) VPL Siemens,
e-learning „LOLA – Univ. din Edinburgh

Anexe: Brevete

1. 93122/1987 "Method and device to study the influence of information on living organisms ", A. Restian, Borza P.N., Nicolau N., Daghe V, owner INSP Bucuresti
2. EP 1796199A1/07.12.2005, „Electric Power Cell” , P.N. Borza, owner Siemens AG Oestereich
3. CBI A/00119/04.02.09 P.N. Borza. M.C. Carp, T.S. Stefan „Energy management system and its operation management methods on vehicles equipped with internal combustion engines”, published in BOPI 11/2010, owner Transilvania University of Brasov

Publicații relevante

1. L-F Pau, PN Borza, Quantum computing architectures with signaling and control mimicking biological processes, Heliyon, 9, 8, Elsevier, 2023/8/1
2. Socrates Kaplanis, Eleni Kaplani, Paul Nicolae Borza, PV defects identification through a synergistic set of non-destructive testing (NDT) techniques, Sensors, 23, 6, MDPI, 2023/3/10, pg 3016
3. Mihai Machedon-Pisu, Paul Nicolae Borza, Is the Transition to Electric Passenger Cars Sustainable? A Life Cycle Perspective, Sustainability, MDPI, 15, 2, 2023/2/1 pg 2614V Herrera-Pérez, A Milo, N Goitia-Zabaleta, PN Borza, A Comparative Analysis based on Energy self-Consumption Regulations in Spain, Romania and Ecuador, 2022 18th International Conference on the European Energy Market (EEM), 1-6
4. M Machedon-Pisu, PN Borza, Impact of the Light-Duty Vehicles' Storage and Travel Demand on the Sustainable Exploitation of Available Resources and Air Pollution Abatement, Sustainability 14 (14), 8571
5. Calin Itu, Polidor Bratu, Nicusor Dragan, Adrian Goanță, George Lucian Nicolae, Marilena Cristina Nițu, Paul Nicolae Borza, Sorin Vlase, Dynamic Response of the Inertial Platform of the Laser ELI-NP Magurele-Bucharest Facility, Mathematics, 10, 12, 2104, MDPI
6. P Bratu, N Dragan, C Itu, PN Borza, O Vasile, S Vlase, AE Nicolescu, An Analysis of the Inertial Platform Behavior of the ELI-NP Project in Case of an Earthquake, Acoustics and Vibration of Mechanical Structures–AVMS-2021, 300-307
7. M Machedon-Pisu, PN Borza, A Methodological Approach to Assess the Impact of Energy and Raw Materials Constraints on the Sustainable Deployment of Light-Duty Vehicles by 2050, Sustainability 2022 13 (21), 11826
8. Borza PN, Vlase S, Tracking and Monitoring of the Alignment System Used for Nuclear Physics Experiments Symmetry 2022 14 (47), 13 <https://www.mdpi.com/2073-8994/14/1/47>
9. M Machedon-Pisu, PN Borza, Impact of the Light-Duty Vehicles' Storage and Travel Demand on the Sustainable Exploitation of Available Resources and Air Pollution Abatement, Sustainability 14 (14), 8571
10. C Itu, P Bratu, N Dragan, A Goanță, GL Nicolae, MC Nițu, PN Borza, Dynamic Response of the Inertial Platform of the Laser ELI-NP Magurele-Bucharest Facility, Mathematics 10 (12), 2104
11. Borza PN, S Vlase, Tracking and Monitoring of the Alignment System Used for Nuclear Physics Experiments, Symmetry 2022 14 (47), 13
12. Borza PN, M Machedon-Pisu, MC Carp, Hybrid electrical storage solutions for developing reliable transport systems
13. 14th International Renewable Energy Storage Conference 2020 (IRES 2020), 206-212S Vlase, C Itu, PN Borza, G Suliman, C Petcu, ML Scutaru, Vibration of Fixing Device of the Reaction Chamber for Gamma-Ray Beam in the Project ELIADe, Acoustics and Vibration of Mechanical Structures—AVMS 2019, 375-382
14. C Itu, P Bratu, PN Borza, S Vlase, D Lixandroi, Design and Analysis of Inertial Platform Insulation of the ELI-NP Project of Laser and Gamma Beam Systems, Symmetry 12 (12), 1972 -2020
15. M Machedon-Pisu, PN Borza, Are Personal Electric Vehicles Sustainable? A Hybrid E-Bike Case Study, Sustainability 12 (1), 32
16. PN Borza, M Machedon-Pisu, F Hamza-Lup, Design of Wireless Sensors for IoT with Energy Storage and Communication Channel Heterogeneity, Sensors 19 (15), 3364
17. P.N. Borza, From Digital Computers to Quantum Computers Based On Biological Paradigms And Progress In Particle Physics, International Journal of Advanced Computer Technology (IJACT), 02.2016
18. P.N. Borza, Kaplani E, An embedded microcontroller unit for PV module monitoring and fault detection, Proceedings ICRERA 2019.
19. LF Pau, P Borza, Colored Algebras and Biological Response in Quantum Biological Computing Architectures, Available at SSRN 3459694
20. F. Hamza Lup, Borza PN, Dragut D, Maghiar M, X3D sensor-based thermal maps for residential and commercial buildings, ACM DL Proceedings of 20th International Conference on 3D Web Technology Pages 49-54, ISBN: 978-1-4503-3647-5
21. Borza P N, Gomes VD, Design Flow for The Intermittent Systems Connected To The Grid Enhanced With The Hybrid Storage Solutions, ESSCAP'2015 Brasov, Romania
22. Borza PN, et all, Embedding patient remote monitoring and assistive facilities on home multimedia systems, Optim 2014
23. Cotfas D. T., P. A. Cotfas, P. N. Borza, D. Ursutiu, C. Samoila: „Wireless system for monitoring the solar radiation”, Accepted for publication in: Environmental Engineering and Management Journal, volume 10/2011, No.8
24. Sanduleac M. V., M. Eremia, L. Toma, P.N. Borza, "Integrating the Electrical Vehicles in the Smart Grid through Unbundled Smart Metering and multi-objective Virtual Power Plants ", IEEE-PES Innovative Smart Grid Technologies ISGT Europe 2011 (In press)
25. A.M. Puscas, M.C. Carp, P. N. Borza, Ghe. Toacse, Improving the Energy Management for LDH- 1250HP Locomotive Using Embedded Systems, Buletinul Universitatii Transilvania, 2008, Brasov, Romania, ISSN: 2065-2119, pg. 311-316
26. A.M. Puscas, Coquery G., P.N. Borza, M.C. Carp, I Szekeley, State of the Art in Mobile Systems' Energy Management and Embedded Solutions for Improving the Energy Efficiency, Buletinul Universitatii Transilvania, Brasov, 2008, Romania, ISSN:

2065-2119, pg. 383-390

27. P.N. Borza, Carp, M.C., Pușcaș, A.M., Sojref, D., Talaba, D.: Supercapacitors and their applications on vehicles. În: International Journal Engineering in Transportation, Belfort, IJEET, Vol. 4, No. 2, Noiembrie 2008, pp. 27-34.
28. P.N. Borza, M.V. Sanduleac, A.M. Puscas, 2015 Heraklion Greece M.Carp, "Energy&Information", InTech 2010, ISBN 978-953-307-210-4
29. Energy efficiency Management for Vehicles and Machines EMVeM 315967/2012 ITN FP7 Marie Curie
30. P Borza and al. PV cells test bench system with remote access through Internet, Optim 2012 IEEE Conference Proceedings 2012

Proiecte relevante

1. "ELICAM-GAMMA", 16ELI/2016 project "Alignment system for an interaction chamber into the gamma beam", sub-system of the Extreme Light Infrastructure (ELI) –Nuclear Physics project, director of project
2. "EMVeM Energy efficiency Management for Vehicles and Machines" FP7-315967/2012 Marie Curie ITN, local coordinator
3. „Smart, Combined, Energy Cells used at Vehicles Propulsion „SMARTPOWERCELL”, nr.5907/2006 – Director of project
4. COST Action 542 "High Performance Energy Storages for Mobile and Stationary Applications", vice-chair 2005-2011
5. COST Action MP1004 "Hybrid Energy Storage Devices and Systems for Mobile and Stationary Applications", vice-chair 2011-2015
6. Optimized electric energy systems for land carriage used batteries and super capacitors, PNII, D21-018/2007-2010, Director of project
7. BIOMEDTEL Vital Sign signal acquisition and tele-transmission, PNII, D21-057/2007-2010, Director of project
8. Program Tempus: „Preparing in the field of Quality Assurance for Industrial Production”, Contract nr. S_JEP-11177-96, Researcher
9. Program „Acquisition, Processing and Tele-transmission Systems for biomedical signals” (3993- 1999) CNCSIS, Researcher

Certific faptul că afirmațiile de mai sus sunt adevărate.

Data:26.11.2023

Semnătura

