Europass Curriculum Vitae

Personal information

Nirvana Alina Popescu, Prof.Dr.Eng. Habil.

Address(es)	Bucharest, Romania
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Nationality	Romanian
Gender	Female

Work experience

Dates	1998-now
Occupation or position held	Professor (2014), associate professor (2008-2014), lecturer (2004-2008), assistant professor (1998-2004)
Main activities and responsibilities	Didactical, Research - Teaching courses on the subjects: - Data Structures and Algorithms (Algorithms and Data Structures) - Digital Computers - Object oriented programming languages - E - Commerce on Microsoft and Magento Technologies - E - Government - E- Services for Administration and Business - Ph.D. coordination since 2016 - Research topic and details on: https://www.brainmap.ro/nirvana-popescu - Coordinating seminars, laboratory and projects on the mentioned subjects - Coordinating Diploma projects and Master dissertations. - Participating in doctoral, diploma and dissertations exam boards. - Coordinating student research teams in competition on the topic of embedded systems - Leader of the Laboratory for “Reconfigurable high-confidence medical devices”
Name and address of employer	University Politehnica of Bucharest, Faculty of Automatic Control and Computer Science, Computer Science Department
Type of business or sector	Academic on Computer Science

Education and training

Dates	2016
Title of qualification awarded	Habilitation (4855/11.08.2016) in *Computer Science, Information Technology and System Engineering*
Name and type of organisation	University Politehnica of Bucharest, Faculty of Automatic Control and Computer Science, Computer Science Department
Principal subjects/occupational skills covered	Title of the Habilitation thesis: *Intelligent Systems and Control*
Dates	1999-2003
Title of qualification awarded	Ph.D in Computer Science (*cum laude* distinction),

[redacted]

Principal subjects/occupational skills covered	Title of thesis - „Selforganizing intelligent fuzzy systems”
Name and type of organisation providing education and training	University Politehnica of Bucharest, Faculty of Automatic Control and Computer Science, Computer Science Department PhD scholarship at Technical University of Bielefeld, Germany, coordinator professor Jianwei Zhang (http://tams-www.informatik.uni-hamburg.de/people/zhang/)
Dates	1998-1999
Title of qualification awarded	M.Sc. in Computer Science,
Principal subjects/occupational skills	Computer architecture
Name and type of organisation providing education and training	University Politehnica of Bucharest, Faculty of Automatic Control and Computer Science, Computer Science Department
Dates	1993-1998
Title of qualification awarded	Engineer in Computer Science
Principal subjects/occupational skills	Programming techniques, Artificial Intelligence, Data structures and algorithms, Data bases, Object oriented programming
Name and type of organisation providing education and training	University Politehnica of Bucharest, Faculty of Automatic Control and Computer Science, Computer Science Department

Self-assessment

European level (*)

	Understanding				Speaking				Writing	
	Listening		Reading		Spoken interaction		Spoken production			
Language	E	C1	E	C1	E	C1	E	C1	E	C1
Language	F	B1	F	B1	F	B1	F	B1	F	B1

(*) Common European Framework of Reference for Languages

Social skills and competences

Good communication skills

- Coordinating seminars, laboratory and projects on the mentioned subjects
- Coordinating PhD thesis, diploma projects and Master dissertations.
- Mentor of the finalist team at Windows Embedded Student Challenge 2005 Competition, Redmond SUA, with the project called “IntelliTraffic - An adaptive traffic control system”
- Mentor of 44Tech team that obtained the First Prize at Windows Embedded Student Challenge, Redmond SUA 2006, with the project called “Forest Embedded Watcher – An Embedded System for the Protection of Forests”

Organisational skills and competences

Good organizational skills

- Member of the scientific committee for Journal of Control Engineering and Applied Informatics, IEEE Transactions on Neural Systems & Rehabilitation Engineering, International Conferences on Data Management Technologies and Applications, International Conferences on Informatics in Control, Automation and Robotics.
- Scientific Referent for IEEE International Conference on Robotics and Automation, International Conference on Control Systems and Computer Science Bucharest, Journal of Control Engineering and Applied Informatics
- Scientific Organizer for IEEE Workshops on Assistive, Rehabilitation, Diagnosis & Therapeutic Engineering, on Medical and Rehabilitation Engineering Applications.

Member of national and international scientific organizations:

- Member of EUCOG - European Network for the Advancement of Artificial Cognitive Systems, Interaction and Robotics
- Member of EURON - European Robotics Research Network
- Member of Robotics Society of Romania

Technical skills and competences	Guest PhD. student of FH-Regensburg, Fachbereich Informatik within an European Academic Exchange Programm: SOKRATES (1999) Researcher at Technical Faculty from the University of Bielefeld, Germany (2001-2002) Expert on Fuzzy Control, Technical University of Denmark (1999) Microsoft Course: Implementing a Commerce-Enabled Web Site Using Microsoft Site Server 3.0, Commerce Editon (May, 2000) Microsoft Course: Implementing Microsoft Site Server 3.0 (May, 2000) **Projects participation:** • Horizon 2020, No. 813278, "A-Wear - A network for dynamic WEarable Applications with pRivacy constraints", H2020 MSCA-ITN- EJD, 2019-2022. • Leader Project P5 in "Creation, Operational and Development of the National Center of Competence in the field of Cancer Crearea, operationalizarea si dezvoltarea Centrului National de Compententa in domeniul cancerului " - CNCC (ID: 220234723) • Main coordinator of project 150/2012 – „An Intelligent Haptic Robot Glove for the Patients Suffering a Cerebrovascular Accident", Partnerships Competition 2011. • Project no.130/2012: „High Performance Computing Of Personalized Cardio Component Models - HEART" – team member • e-CAESAR eSAFE , 2010-2011 , UPB and Fokus Institute, Berlin • Main coordinator of the international project E-CAESAR nPA Connector 2010, with Institutul Fokus, Berlin, Germany • e-CAESAR EUSDRO, 2008, UPB and Fokus Institute, Berlin • E-CAESAR PrO,2009, UPB and Fokus Institute, Berlin , Germany • E-CAESAR SETUP, 2008, UPB and Fokus Institut, Berlin • International Grant Horizon 2020, No. 643636, "Natural sense of vision through acoustic and haptics (SOUND OF VISION), 2015-2017 –team member • CNCSIS project - ID 1692/2009: "Development of biologically inspired integrated cognitive architectures" • Project D11 - 068 /18.09.2007: "Embedded systems of neural-prosthesis type for is for the recovery of handicapped people (SINPHA)" - coordinator • Project no. 259 CEEX/ 11.09.2006: "Technological control and integration of intelligent materials and structures (CITMSI)" • Project no. 24 CEEX – I03/10/10/2005: „Sharing resources for research and training" • Member in 5 POSDRU projects **Author of 10 books and more than 100 papers presented at prestigious international conferences and published in journals with high impact factor.** **More than 600 citations in high indexed journal articles.** **Expert evaluator for R&D and innovation projects for the European Commission since 2017.** Webpage: https://www.brainmap.ro/nirvana-popescu

Selected publications:

- Asma Channa, Nirvana Popescu, "Deep Learning in Smart eHealth Systems. Evaluation Leveraging for Parkinson's Disease", book, SpringerBriefs in Computer Science, November 2023, https://link.springer.com/book/10.1007/978-3-031-45003-7.
- Aura Loredana Popescu, Nirvana Popescu, Drawing Interpretation Using Neural Networks and Accessibility Implementation in Mobile Application, Computation Journal 2022, 10(11), p. 202; doi:10.3390/computation10110202, WOS:000894595500001.
- Asma Channa, Madeha Memon, Oana Cramariuc, Nirvana Popescu, Nadia Mammone and Giuseppe Ruggeri, "Parkinson's Disease Resting Tremor Severity Classification using Machine Learning with Resampling Techniques" Frontiers in Neuroscience, Vol 16, 2022 IF =5.152, Q2, WOS:000883949800001

- Mircea Ivanescu, Nirvana Popescu, Decebal Popescu, "Delay Time Fractional Order Model for the Soft Exoskeleton Glove Control", IEEE Transactions on Human-Machine Systems, Q2, IF 4.124, Volume: 51, Issue: 6, pp. 740-745, ISSN: 2168-2291, WOS:000719561500022, DOI:10.1109/THMS.2021.3107491, 2021
- Asma Channa; Rares Ifrim; Decebal Popescu; Nirvana Popescu, "A-WEAR Bracelet for Detection of Hand Tremor and Bradykinesia in Parkinson's Patients", Sensors, 2021, 21, 981, WOS:000615495300001
- Rashed Baidaa Mutasher, Popescu Nirvana, "Critical Analysis of the Current Medical Image-Based Processing Techniques for Automatic Disease Evaluation: Systematic Literature Review", Sensors, Volume 22, Issue18, sept. 2022 (Q2 IF = 3.847) WOS:000856787300001
- Mircea Ivanescu, Ioan Dumitrache, Nirvana Popescu and Decebal Popescu, "Fractional Order Model Identification of a Person with Parkinson's Disease for Wheelchair Control", Fractal and Fractional Journal 2023, 7(1), 23; https://doi.org/10.3390/fractalfract7010023 (Q1, IF=3.577) WOS:000918114600001
- Channa, A., Ruggeri, G., Mammone, N., Ifrim, R. C., Iera, A., & Popescu, N., Parkinson's Disease Severity Estimation using Deep Learning and Cloud Technology. In 2022 IEEE International Conference on Omni-layer Intelligent Systems (COINS) (pp. 1-7). IEEE. DOI: 10.1109/COINS54846.2022.9854945 WOS:000859114600060, 2022.
- Nicolae Cudlenco, Nirvana Popescu, Marius Leordeanu, "Reading into the mind's eye: Boosting automatic visual recognition with EEG signals", Neurocomputing, Volume 386, 21 April 2020, Pages 281-292, 2020, Q1, IF=4.438. WOS:000528861400023
- Channa Asma; Popescu Nirvana, Faisal Muhamad, Parkinson's Disease Gait Evaluation Leveraging Wearable Insoles and Deep Learning Approach, 2022 8th International Conference on Control, Decision and Information Technologies (CODIT'22) , pp.543-549, WOS:000846862800090
- Rashed Baidaa Mutasher, Popescu Nirvana, "Machine Learning Techniques for Medical Image Processing", 2021 International Conference on E-Health and Bioengineering (EHB 2021), 9th Edition, DOI10.1109/EHB52898.2021.9657673, 2021, WOS:000802227900133
- Justyna Skibinska, Radim Burget, Asma Channa, Nirvana Popescu, Yevgeni Koucheryavy, "COVID19 diagnosis at early stage based on smartwatches and machine learning techniques", IEEE Access August 2021 (Q2 IF =3.367), ISSN: 2169-3536, DOI: 10.1109/ACCESS.2021.3106255, https://ieeexplore.ieee.org/document/9517046. WOS:000692228400001
- Aura-Loredana Popescu, Nirvana Popescu, Ciprian Dobre, Elena-Simona Apostol and Decebal Popescu, "IoT and AI-Based Application for Automatic Interpretation of the Affective State of Children Diagnosed with Autism", Sensors 2022, 22(7), 2528, https://doi.org/10.3390/s22072528 ; WOS:000781611200001
- Mircea Ivanescu, Ioan Dumitrache, Nirvana Popescu, Decebal Popescu, "Control Techniques for a Class of Fractional Order Systems", Mathematics 2021, 9, 2357. https://doi.org/10.3390/math9192357, Q1, IF= 2.258. Volume9, Issue19, 31 Oct 2021, WOS:000745211800001
- Mircea Ivanescu, Nirvana Popescu, Decebal Popescu, "Physical Significance Variable Control for a Class of Fractional-Order Systems", Journal on Circuits, Systems and Signal Processing (IF = 1.681), DOI 10.1007/s00034-020-01531-6, ISSN 0278-081X, Springer, Sept. 2020, WOS:000565845600002. http://link.springer.com/article/10.1007/s00034-020-01531-6