

University POLITEHNICA of Bucharest Faculty of Automatic Control and Computers



Splaiul Independenței nr.313, sector 6, cod 060042, Bucharest, ROMANIA



Professor dr. eng. Nirvana Popescu PhD coordination in "Computers and Information Technology" Doctoral School of Automatic Control and Computers University POLITEHNICA of Bucharest

Contact:

Nirvana Popescu, Professor, PhD, Habil.
University Politehnica of Bucharest
Faculty of Automatic Control and Computers
Computer Science Department
313 Splaiul Independentei, room PR 602, sector 6, 060042, Bucharest, Romania
E-mail: nirvana.popescu@cs.pub.ro
Web: https://cs.pub.ro/index.php/people/userprofile/nirvana_popescu

Research profile:

- eHealth: development of innovative reconfigurable systems dedicated to the interoperability of different medical devices; development of high confidence medical devices, software and systems; design of complex systems incorporating reconfigurable devices, sensors and actuators which dynamically control the medical functions and processes. All information taken from sensors, communication, reconfigurable modeling and calculation and perfect integration with physical elements and processes leads up to a new class of "cyber-physical" systems with a high degree of functionality and adaptability.
- Applications based on Brain-Computer Interfaces
- Intelligent self-organizing fuzzy systems
- Intelligent control systems for hyper-redundant robots applied in medicine
- Rehabilitation medical devices (design/implementation)

PhD Coordinator since 2016.

Publications: 8 books/chapters; over 70 scientific papers and articles published in prestigious international journals and presented at important and well indexed conferences.

Research Projects (selection):

- Grant no. 150/2012, Partnership Program 2011 Competition: "Intelligent Haptic Robot Glove for the patients suffering a cerebrovascular accident (IHRG)", 2012-2016. Project manager: Nirvana Popescu.
- Grant PN II, no. D11 068 /18.09.2007: "Embedded systems of neural-prosthesis type for the recovery of handicapped people *SINPHA*", 2007-2010. Project manager: **Nirvana Popescu**.
- International research project no. eCAESAR-119-220-2010-09-01-x, "E-CAESAR nPA Connector", 2010, together with Fokus Institute, Berlin, Germany. Project manager: Nirvana Popescu.

Membership to scientific organizations:

- Member of EUCog European Association for Cognitive Systems
- Member of EURON European Robotics Research Network
- Member of Robotics Society of Romania

PhD research themes (proposed in 2016):

- BCI-based systems for neuro-motor rehabilitation
- Advanced P300-based BCI applications
- Advanced security protocols of IoT systems for eHealth applications
- Multi-agent systems for a cloud-based eHealth application