

Mihaela UNGUREANU - RESEARCH PROJECTS

PROJECT MANAGER OF THE FOLLOWING RESEARCH PROJECTS

1. DFG-CNSIS research project, project title ***Contributions to the noninvasive maternal and fetal monitoring during pregnancy and labor*** - *Contributii la monitorizarea materna si fetala nein vaziva in timpul sarcinii si al travaliului*, supported by German Research Foundation - *Deutsche Forschungsgemeinschaft* (DFG) and The National University Research Council in Romania - *Consiliul National al Cercetarii Stiintifice din Invatamantul Superior* (CNSIS). Director Conf.Dr.Ing. Ungureanu Mihaela. 2009-2011.
2. Marie Curie Intra-European Fellowship, FP6-2005-Mobility-5 (EIF), proposal number 041452. Project title ***Non-linear analysis of dynamic interactions between brain areas (NADIBA)***, supported by The European Commission. Director Conf.Dr.Ing. Ungureanu Mihaela. 2007-2008.
3. Fulbright Senior Research Award, grant number 370, project title ***EEG Feature Extraction for Motor Imagery***, supported by The Fulbright Commission. Director Conf.Dr.Ing. Ungureanu Mihaela. 2006.
4. Research project 436 RUM 113/29/0-1, project title ***Fetal ECG extraction from abdominal recordings: evaluation of the Event-Synchronous-Canceller approach*** - *Extragerea electrocardiograamei fetale din semnalele abdominale: evaluarea metodei Event-Synchronous-Canceller*, supported by German Research Foundation - *Deutsche Forschungsgemeinschaft*. Director Conf.Dr.Ing. Ungureanu Mihaela. 2006.
5. Fellowship 048.031.2003.005, project title ***Detection and Analysis of Diaphragmatic EMG Signals in Adults and Neonates***, supported by Netherlands Organisation for Scientific Research - *Nederlandse Organisatie voor Wetenschappelijk Onderzoek*. Director Conf.Dr.Ing. Ungureanu Mihaela. 2004-2005
6. Research project A 146/2007, project title ***Foetal monitoring by using the non-invasive abdominal recordings: foetal ECG extraction and its analysis for diagnosis*** - *Monitorizarea fetală prin utilizarea înregistrărilor abdominale nein vazive: extragerea și analiza ECG-ului fetal în vederea diagnosticării*, supported by The National University Research Council in Romania - *Consiliul National al Cercetarii Stiintifice din Invatamantul Superior*. Director Conf.Dr.Ing. Ungureanu Mihaela. 2007-2008
7. Research project AT 179/2004, project title ***Informatic system for diagnosis and early detection of respiratory system diseases, based on PSG (polysomnogram)*** - *Sistem informatic bazat pe analiza polisomnografica pentru diagnosticarea si tratamentul preventiv al afectiunilor sistemului respirator*, supported by The National University Research Council in Romania - *Consiliul National al Cercetarii Stiintifice din Invatamantul Superior*. Director Conf.Dr.Ing. Ungureanu Mihaela. 2004-2005

RESEARCH PROJECTS I HAVE WORKED ON

8. Research project CEEX PNCDI-2 11-069 ***Intelligent locomotor prostheses*** *Proteze locomotorii inteligente*, Planul National Pentru Cercetare - Dezvoltare Si Inovare 2007 – 2013, Programul 4 “Parteneriate in domeniile prioritare”. Director Prof.Dr.Ing. Strungaru Rodica. Period: 2007-2010.
9. Project report - Research project CEEX PC-D03-PT03-677 ***Development of an integrated network for research regarding methods, analysis and equipments for pattern detection of caloric use in subjects with chronic diseases*** - *Formarea unei rețele integrate de cercetare în domeniul metodelor, analizelor și echipamentelor pentru determinarea pattern-urilor consumului caloric și pattern-urilor de dinamică în timpul mersului la subiecți cu boli cronice*, supported by The Ministry of Education, Research and Youth, under INFOSOC – *Ministerul Educatiei si*

Cercetarii din Romania, Planul National de Cercetare, Dezvoltare si Inovare, Programul INFOSOC. Director Prof.Dr.Ing. Strungaru Rodica. Period: 2005-2008

10. Project report - Research project A 353/2005 - 38, project tile ***Tools for information extraction from medical signals applied to e-health systems*** - *Instrumente de extragere a informatiei din semnale medicale pentru sisteme informatice e-health*, supported supported by The National University Research Council in Romania - *Consiliul National al Cercetarii Stiintifice din Invatamantul Superior*. Director Prof.Dr.Ing. Strungaru Rodica. Period: 2005-2008
11. Project report - Research project 17.04.12/29.10.2004 (subcontract of the VIASAN grant no. 179/2004), project tile ***Hypotesis, conceptual models and technical solutions for neuromodulation*** - *Ipoteze, modele conceptuale de lucru și soluții tehnice de neuromodulare*, supported by The Ministry of Education, Research and Youth, under The National Plan for Research, Development and Innovation, Life and Science Programme – *Ministerul Educatiei si Cercetarii din Romania, Planul National de Cercetare, Dezvoltare si Inovare, Programul Viata si Sanatate*. Director Prof.Dr.Ing. Pasca Sever. Period: 2004-2006
12. Project report - Research project 17.04.11/29.10.2004 (subcontract of the VIASAN grant no. 180/2004), project tile ***Conceptual solutions for EEG processing in voluntary skilled motor activity*** - *Soluții conceptuale pentru valorificarea conversiei digitale a biopotențialelor motorii cerebrale voluntare în comanda unor sistem de acționare extracorporale*, supported by The Ministry of Education, Research and Youth, under The National Plan for Research, Development and Innovation, Life and Science Programme – *Ministerul Educatiei si Cercetarii din Romania, Planul National de Cercetare, Dezvoltare si Inovare, Programul Viata si Sanatate*. Director Prof.Dr.Ing. Pasca Sever. Period: 2004-2006
13. Project report - Research project 17.04.10/29.10.2004 (subcontract of the VIASAN grant no. 179/2004), project tile ***Concept of an integrated system for recording, analysis and digital conversion dedicated to EEG processing in voluntary skilled motor activity*** - *Concept de sistem integrat de inregistrare, analiza si conversie digitala a biopotențialelor cerebrale motorii voluntare*, supported by The Ministry of Education, Research and Youth, under The National Plan for Research, Development and Innovation, Life and Science Programme – *Ministerul Educatiei si Cercetarii din Romania, Planul National de Cercetare, Dezvoltare si Inovare, Programul Viata si Sanatate*. Director Prof.Dr.Ing. Pasca Sever. Period: 2004-2006
14. 10 months DAAD postdoctoral fellowship (Deutscher Akademischer Austausch Dienst - German Academic Exchange Service) at the University of the German Armed Forces Munich, Germany. The research project was developed in cooperation with ASKLEPIOS Medical Center of Intensive and Respiration Medicine in Gauting - Munich, Germany, under the supervision of Prof. Werner Wolf. October 1, 2003 – July 31, 2004. Coordonator Prof.Dr.Ing. Werner Wolf and Mihaela Ungureanu.
15. Research project 836/1996, additional document 334/9.04.1998, project title ***Methods for medical diagnosis based on computational techniques*** - *Metode de diagnosticare medicala bazate pe tehnici computationale*, supported by Romanian Ministry of Education, Research and Youth – *Ministerul Cercetarii si Tehnologiei din Romania*. Director Prof.Dr.Ing. Lazarescu Vasile. Period: 1996-2002
16. Research project 836/1996, additional document 334/9.04.1998, project title ***Applications of neural networks in the diagnosis of chronic maladies*** - *Aplicatii ale retelelor neurale artificiale in diagnosticarea maladiilor cronice*, supported by Romanian Ministry of Education, Research and Youth – *Ministerul Cercetarii si Tehnologiei din Romania*. Director Prof.Dr.Ing. Lazarescu Vasile. Period: 1996-2002
17. Research project 836/1996, additional document 334/9.04.1998, project title ***Applications of the evolutionary algorithms in the satellite teledetection*** - *Aplicatii ale algoritmilor evolutivi in probleme de teledetectie satelitara*, supported by Romanian Ministry of Education, Research and

Youth – *Ministerul Cercetarii si Tehnologiei din Romania*. Director Prof.Dr.Ing. Lazarescu Vasile. Period: 1996-2000

18. Research project 836/1996, additional document 334/9.04.1998, project title **Algorithms and methods for scientific visualization of biomedical data** - Algoritmi si metode pentru vizualizarea stiintifica a datelor biomedicale, supported by Romanian Ministry of Education, Research and Youth – *Ministerul Cercetarii si Tehnologiei din Romania*. Director Prof.Dr.Ing. Lazarescu Vasile. Period: 2000-2002

COORDINATOR OF THE EDUCATIONAL PROGRAMMES

Coordinator of the **Erasmus (Socrates) Bilateral Agreement** between Politehnica University of Bucharest, Romania and Technical University Eindhoven, The Netherlands. Students and teaching staff mobilities are included. 2006-2008

Coordinator of the **Erasmus (Socrates) Bilateral Agreement** between Politehnica University of Bucharest, Romania and Universitaet der Bundeswehr, Germany. Students and teaching staff mobilities are included. 2006-2008

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