

Alexandru NECHIFOR

138 Calea lui Traian, Rm.-Vâlcea, Romania, 240100

+447586043845, alexandrun@ieee.org

Date of birth: 11.05.1987

EDUCATION

- **Graduate Student at University of Manchester** 20th Sep 2010 – ongoing
MSc in Electrical Power Systems Engineering (one year taught program)
Expected end date: Aug 2011
Expected graduation date: Dec 2011
Manchester, UK
- **Bachelor Degree in Electrical Engineering from University “Politehnica” of Bucharest** Oct 2006 – July 2010
Faculty of Engineering in Foreign Languages, German Department
Field: Electrical Engineering and Telecommunications
Major: Applied Electronics
Bucharest, Romania
- **Erasmus Study Exchange** Mar 2009 – Aug 2009
University “Politecnico di Milano” - Department of Computer Science and Electronics
Milan, Italy

PUBLICATIONS

- *Online Measurements and Control of a Laboratory Scale DC Grid* 5-7 May 2009
Nechifor, A.; Marin, M.; Nicolaou, G.; Popa, M.
IEEE International Instrumentation and Measurement Technology Conference (I2MTC 2009)
(has received the **Best Undergraduate Student Paper Award**)
Singapore
- *Online Monitoring of the Power Transfer in a DC Test Grid* 29 Mar 2010
Albu, M.; Kyriakides, E.; Chicco, G.; Popa, M.; **Nechifor, A.**
IEEE Transactions on Instrumentation and Measurement
- *On-line monitoring of the efficiency of Photo-Voltaic panels for optimizing maintenance scheduling* 3-6 May 2010
Cristaldi, L.; Faifer, M.; Ferrero, A.; **Nechifor, A.**
IEEE International Instrumentation and Measurement Technology Conference (I2MTC 2010)
Austin, Texas
- *Smart Storage for Active Distribution Networks. Estimation and Measurement Solutions* 3-6 May 2010
Albu, M.; **Nechifor, A.**; Creanga, D.
IEEE International Instrumentation and Measurement Technology Conference (I2MTC 2010)
Austin, Texas
- *Storage selection for DG applications containing virtual synchronous generators* 28 June – 2 July 2009
Albu, M.; Visscher, K.; Creanga, D.; **Nechifor, A.**; Golovanov, N.
IEEE PowerTech Conference, 2009
Bucharest, Romania
- *Development of a DC test network for monitoring power transfer* 5-7 May 2009
Albu, M.; Chicco, G.; Kyriakides, E.; Nicolaou, G.; **Nechifor, A.**; Chirila, A.-I.; Deaconu, I.-D.
IEEE International Instrumentation and Measurement Technology Conference (I2MTC 2009)
Singapore
- *Frequency estimation in distribution grids from voltage monitoring data* May 2010
Neurohr R.; Albu M.; **Nechifor A.**
Presented at OPTIM 2010 conference (Proceedings will be indexed in IEEEExplore)
Brasov, Romania
- *Communication among measurement and control units in a DC microgrid* May 2009
Albu, M.; **Nechifor, A.**; Popa, M.; Marin, M.; Caciuleanu, A.; Kyriakides, E.
17th International Conference on Control Systems and Computer Science
Bucharest, Romania
- *Computer controlled measurement systems. A new VLAB application* Nov 20 -21, 2008
Marin, M.; **Nechifor, A.**
6th International Symposium on Advanced Topics in Electrical Engineering
Bucharest, Romania
- *Society news – “Powerhouse” Team Report* 2010
Nechifor, A.; Leonard, J.
IEEE Instrumentation and Measurement Magazine

AWARDS AND SCHOLARSHIPS

- **Best Undergraduate Student Paper Award** May 5-7, 2009
IEEE International Instrumentation and Measurement Technology Conference (I2MTC 2009) Singapore
- *“Open horizons” scholarship from the Romanian Foundation “Dinu Patriciu”* Sep 2010 - Sep 2011
Private scholarship funding my **MSc in Power Systems at University of Manchester**
- *Research grant at University of Cyprus* 11 Aug – 26 Aug 2010
Developed a Java project to automate the data logging from a Phasor Measurement Unit Nicosia, Cyprus
Worked under the guidance of professor Elias Kyriakides (elias@ucy.ac.cy)
- *Instrumentation and Measurement University (IEEE IMU 2010 and IEEE IMU 2009)* 19 - 24 Jul 2010 and
Organized and financially supported by IEEE Instrumentation and Measurement Society 22 - 24 Jul 2009
Obtained IEEE Certificates equivalent to a total of 6 ECTS (credit points) Trento, Italy
- *PQACTNET grant at University of Cyprus* 02 Aug – 31 Aug 2009
Team member in the project **“Power Quality Assessment in Active Distribution Networks”** Nicosia, Cyprus
<http://www.microderlab.pub.ro/research/PQACTNET/>
- *Scholarship from MicroDERLab Laboratory at University “Politehnica” of Bucharest (UPB)* Jun –Sep, 2008
Research assistant in the European **VSYNC** Research Project - Virtual Synchronous Machines
(VSG's) for Frequency Stabilization in Future Grids with a Significant Share of Decentralized Generation
- *Erasmus Scholarship for Study Exchange* Mar 2009 – Aug 2009
University Politecnico di Milano - Department of Computer Science and Electronics
- *Stochastic Modeling of Renewable Energy Sources in European Electricity Markets* Sep 3-5, 2008
Summer school, part of the European Research Project “GreenNet-Incentives” Stuttgart, Germany
Financial support to attend from Vienna University of Technology
- *Energy end-use efficiency and RES-E integration* Oct 23-25, 2008
Autumn school, part of the European Research Project “GreenNet-Incentives” Milan, Italy
Financial support to attend from Vienna University of Technology
- *4th place out of 500 teams from 40 countries* Oct 24, 2009
International Programming Competition IEEEExtreme Challenge
Member of team “Powerhouse” from Romania
- *Participation at the final phase, team-leader of team “Powerhouse” from Romania* May 2-4, 2008 and 2009
8th and 9th BME International 24-hour Programming Contest Budapest, Hungary
- *2nd prize in the UPB annual scientific project competition* May 2008
Paper: “Bifurcation in nonlinear oscillatory circuit”
- *3rd prize in the UPB annual scientific project competition;* May 2007
Paper: “Data transmissions security”
- *Study Scholarship at University “Politehnica” of Bucharest* since Oct 2006
- *Member of the Romanian Team of Informatics* May, Jun 2006
Participated in two preparation camps for the International Competitions in Informatics
- *The Romanian National Contest (Olympiad) in Mathematics - special prize* May 2003

TECHNICAL SKILLS

- Algorithms, C++, Java, PHP, MySQL, VBA, Linux, JavaScript, Flash, HTML
- Building, testing and using Microchip microcontroller based projects
- Matlab, Simulink, LabView, IPSA, PowerWorld, PSCAD, OrCAD Cadence
- Project management - Xpert Personal Business Skills certification 22 Jan 2010

PROFESSIONAL EXPERIENCE

- **Research assistant in the MicroDERLab Research Group** Jun 2008 – Sep 2010
Department of Electrical Engineering, University “Politehnica” of Bucharest
under the guidance of professor Mihaela Albu (albu@ieee.org)

Developed measurement systems for automating the data acquisition process
Implemented the remote and internal communication in a laboratory-scale DC network
Developed software solutions for automating data analysis in Energy Storage Systems
Developed presentation websites for undergoing research projects
Actively participating in collecting data and writing reports
- **Research assistant in the Ferrero Research Group** Mar 2009 – Jul 2009
Department of Electrical Engineering, University “Politecnico di Milano”
under the guidance of professor Alessandro Ferrero (alessandro.ferrero@polimi.it)
Milan, Italy

Developed an experimental measurement system for acquiring data from a PV panel
Automated the acquisition process and the storage of the data in a remote database
Developed a web-based interface for monitoring and controlling the acquisition software
- **Administrator of the UNESCO computer laboratory** Mar 2008 – Mar 2009
University “Politehnica” of Bucharest
Faculty of Engineering in Foreign Languages, German department

Developed the wireless network of the UNESCO laboratory
Implemented the secure communication among the computers
Maintained and updated the software tools and hardware equipment
- **Part-time Web Developer** Oct 2006 – Feb 2008
Energy Holding, 24 Paris Street, Bucharest

Coded dynamic web pages in PHP, MySQL
Coordinated the work of three other coders as team leader
Developed communication skills with the client

PRESENTATIONS AND INVITED SEMINARS

- “Advanced control and modeling as part of Smart Grids technologies” 23-24 Jun 2010
Workshop organized within the European project VSYNC
Gave the presentation: “Monitoring solutions and smart storage in the active distribution grids”
Bucharest
- “Aim for your future! Career experience starts from college” student conference 24 Mar 2010
Center for Counseling and Career Orientation at University “Politehnica” of Bucharest
Gave the presentation: “Internship and research”
UPB, Bucharest
Encouraged students to pursue research work during their studies and get involved in IEEE
- “A world at your feet! Study scholarships, private scholarships and other opportunities!” 9 Dec 2009
Center for Counseling and Career Orientation at University “Politehnica” of Bucharest
Gave the presentation: “Chances for students: IEEE, Instrumentation & Measurement Society”
UPB, Bucharest
- National Symposium of Electrical Engineering (SNET) at University “Politehnica” of Bucharest 27 Nov 2009
Gave the presentation: “DC grid functionality of the laboratory at EB105”
- Official opening of the academic year at University of Bucharest, Department of Informatics 1 Oct 2009
Gave the talk: “IEEE Xtreme challenge”, promoting the IEEE student programming competition
University of Bucharest
- Graduate Student Panel Discussion at the IEEE conference I2MTC 2009 May 2009
Gave the presentation: “The Romanian educational system”
Singapore
- “Selection of the appropriate energy storage system for active distribution grids” 2-5 Sep 2008
Presented at the International Summer School on “*Stochastic Modelling of Renewable Energy Sources in European Electricity Markets*”, part of the European GreenNet-Incentives Project
Stuttgart, Germany

AFFILIATIONS

- *Graduate Student Representative* in the Administrative Committee (AdCom) of the IEEE Instrumentation and Measurement Society Jan 2011 – ongoing
- *Undergraduate Student Representative* in the Administrative Committee (AdCom) of the IEEE Instrumentation and Measurement Society Jan 2009 – Dec 2010
- *IEEE Student Ambassador* – promoting IEEE and their global competitions and activities May 2009 – ongoing
- *IEEE Student Member* of the "IEEE Instrumentation & Measurement Society" May 2008 - ongoing
- *IEEE Student Member* of the "IEEE Power & Energy Society" May 2008 - ongoing
- Member of *Center for counseling and career orientation*, University "Politehnica" of Bucharest Oct 2009 – Jul 2010

SOFT SKILLS

- "Rhetoric" seminar taught in German by Mr. Oliver Gross from Frankfurt 24 and 25 Feb 2010
Financial support to attend the event from "Hanns Seidel" Foundation Sibiu, Romania
- "Successful presenting" seminar taught in German by Mr. Oliver Gross from Frankfurt 25 and 26 Feb 2010
Financial support to attend the event from "Hanns Seidel" Foundation Sibiu, Romania

LANGUAGES

Romanian	mother tongue						
English	TOEFL Certificate of English (Internet Based Test) 113 / maximum 120						5 th Dec 2009
	Reading	29	Listening	30	Speaking	26	Writing 28
German	<i>Einstufungstest onDaF - B2</i> - 111/160						22 nd Jan 2008
	<i>International Summer German Course</i> - Advanced level – C1 Georg – August University of Göttingen, Germany						3-31 Aug 2007
Italian	<i>Italian Course</i> – B1 certificate University Politecnico di Milano, Italy						Apr 2009 – Jun 2009

INTERESTS

- 1st DAN KARATE DO SHITO RYU grade certificate (black belt) Nov 2004
- Travel and experience other cultures; play chess; jogging

VOLUNTEER ACTIVITIES

- Student Representative of the MSc in Electrical Power Systems Engineering at University of Manchester Oct 2010 – ongoing
- Member of CCOC (Center for Career Counseling and Orientation) for the students of UPB Nov 2009 – Jul 2010
Event organizer, developer and administrator of the official website www.ccoc.pub.ro

REFERENCES

Prof. Dr. Eng. Mihaela Albu

Department of Electrical Engineering, University "Politehnica" Bucharest, albu@ieee.org

Prof. Dr. Eng. Alessandro Ferrero

Department of Electrical Engineering, "Politecnico di Milano", alessandro.ferrero@polimi.it

Mr. Kim Fowler

President of the IEEE Instrumentation and Measurement Society, kimf@ieee.org