

## INFORMAȚII PERSONALE



## Alecsandru Vladimir Chiroasca

 (România)

Sexul Masculin | Data nașterii 5 Nov 78 | Naționalitatea română

## EXPERIENȚA PROFESIONALĂ

1 Dec 08

**Research Assistant**

University of Bucharest - Faculty of Physics  
Bd. Mihail Kogalniceanu Nr. 36-46, Sector 5, Bucuresti (România)

Implementation of Research Center for Radiation Protection (Grant 62/CP/1), dosimetry studies and experimental data evaluation in our collaboration with Cernavoda NPP (Contract 761/2007 and 25477/2011)

Tipul sau sectorul de activitate University (Education)

Iun 03–Dec 08

**National EDI Coordinator**

GS1 Romania (former EAN Romania)  
Bd. Aviatorilor Nr. 50 A, Sector 1, Bucuresti (România)

Manage the Electroni Data Interchange department team and develop the industry standard at national level.

During this period I managed small to medium teams (for up to 20 peoples) and worked with partners like METRO Romania, Billa Romania Praktiker, real,-, Baumax, Selgros.

During this period I managed to expand the EDI market for a few thousand euros a year to more than 100 000 EUR/year.

Tipul sau sectorul de activitate Standardisation organization

01–03

**IT Manager**

ROMCARE S.A.  
Gn. Ernest Brosteanu Nr. 33A, Sector 1, Bucuresti (România)

Running and expanding an Internet Service Provider managing a team of 5 employees.

Hadled almost all types of intercommunication setup (from PTSN to satellite or leased line data communications).

Medcon Telecardiology Technical Representative for Romania. Worked with large clients like Colentina, C.C. Iliescu, Iasi and Timisoara Cardiology departments.

Tipul sau sectorul de activitate Telecommunications

99–01

**Network Administrator**

University of Bucharest  
Bd. Mihail Kogalniceanu Nr. 36-46, Sector 5, Bucuresti (România)

Implementation and mantainance for the Training Center IT infrastructure (network and computers).

My activity also incuded Programming Lab assistant responsibilities

During this period I presented the work "Multimedia Object Oriented Databases" at the 2'nd International Simposio for Administration Informatics

Tipul sau sectorul de activitate Education (University)

Iun 06–Prezent

**Associate and Administator**

networks s.r.l., Cugir (România)

Business Owner and senior consultant and ICT security expert.

During this period, my activity lead to company leadership in the field of infrastructure management and security.

Another important development was the introduction of new technologies allowing for better software solutions to be developend (using technologies like SSR - Python, Django, AJAX (mean stack developemnt), Reactive (Meteor JS).

Since 2010, we are developing our own infrastructure health analysis system by the means of advanced mathematical algorithms to handle the Big Data that the infrastructure safety systems are sending (SNMP, net FLOW a.s.o).

**EDUCAȚIE ȘI FORMARE**

Iun 14–Dec 15

**Postdoctoral Research Project**

Faculty of Physics, Bucuresti (România)

Postdoctoral Grant awarded providing founding for researches in the field of Nuclear Facility Decomissioning applied to HELEN I Subcritical Assembly owed by the Faculty of Physics, University of Bucharest

1 Oct 10–30 Sept 13

**PhD. Degree in Nuclear Physics**

University of Bucharest, Faculty of Physics

Bd. Mihail Kogalniceanu Nr. 36-46, Sector 5, Bucuresti (România)

Neutron Field Dosimetry

6 Dec 10–8 Dec 10

**National Training Course on Individual Dosimetry for Neutrons**

National Comission for Nuclear Activities Control

B-dul. Libertatii, Nr. 14, Sector 5, Bucuresti (România)

echnical Assistance to the Nuclear Regulatory Body of Romania for Improving Regulatory Skills (Pahse II)

Neutron spectroscopy

Neutron Field Dosimetry

Ionizind Radiation

08–10

**Master Degree**

University of Bucharest, Faculty of Physics

Bd. Mihail Kogalnicean Nr. 36-46, Sector 5, Bucuresti (România)

Atomic and Nuclear Interactions, Elementary Particles and Applications, Informatical Physics and Econophysics

Finished with the master thesis: Advanced Dosimetry Methods - Thermolumiscent radiation detectors (TLD). This thesis concludes my activity. It has two major parts, gamma monitoring and neutron field radiation field monitorization using TLD 600/700 detectors. The coordinators for this thesis where prof. univ. dr. Ionel Lazanu and conf. dr. Mircea Bercu.

All activities are performed in collaboration to the Cernavoda Nuclear Powerplant

98–07

**Batchelor in Physics**

University of Bucharest, Faculty of Physics

Bd. Mihail Kogalniceanu Nr. 36-46, Sector 5, Bucuresti (România)

Finished with the work named Extended Hadronic Cascade Simulation, it consists of severael simulations made with the CORSIKA code on a cluster that I previously installed and prepared for severael incident particles ranging from protons to Feros nuclei at several incident directions within

the earths atmosphere.  
This work was coordinated by prof. univ. dr. Octavian Sima.

COMPETENȚE PERSONALE

Limba(i) maternă(e) română

Alte limbi străine cunoscute

	ÎNȚELEGERE		VORBIRE		SCRIERE
	Ascultare	Citire	Participare la conversație	Discurs oral	
engleză	B2	B2	B2	B2	B2

Niveluri: A1 și A2: Utilizator elementar - B1 și B2: Utilizator independent - C1 și C2: Utilizator experimentat  
Cadrul european comun de referință pentru limbi străine

Competențe de comunicare Good communication skills gained through my management experience.  
Team player, working with small to large teams.

Competențe organizaționale/manageriale

Leadership (worked with small and medium mixed - intercompany - teams as both manager and team member.  
Sense of Organization after working as a standardization organization manager together with all major retail players in Romania.  
While working in GS1 Romania, my activity included the Project Manager for TECNET (the first complete Romanian EDI solution)

Competență digitală

AUTOEVALUARE				
Procesarea informației	Comunicare	Creare de conținut	Securitate	Rezolvarea de probleme
Utilizator experimentat	Utilizator experimentat	Utilizator independent	Utilizator experimentat	Utilizator experimentat

Competențele digitale - Grilă de auto-evaluare

Certified Linux Server Administrator

Current projects lead me to a wider implementation of web technologies reaching responsive and even reactive design for my latest projects. Technologies include standard applications, web applications, mobile technologies, REST, REACT, DDP. My applications use cases range from 1 tier to 3 tier development for both Server Side Rendering and Client Side Rendering (AJAX).

Network and Server management expertise include a large installation base with networks with few stations to networks including more than 100 users (200+ computers) with distinct security levels. The employed technologies include both closed source (Windows Active Directory, Mac OS X Directory) and Open Source (active member of Samba community since 2003) network management technologies. Network security and Safety assesment was employed by thrusted suppliers like Tenable and Open VAS but also by the means of custom crafted network audit tools targeting certain not so well known vulnerabilities.

Computer skills include both development (C, C++, C#, JAVA SE, ME and J2EE, Python and Perl) and management (infrastructure planning and development). I am also skilled in the management of network infrastructures and project management (both scientific and commercial).

Developed several codes (single thread and parallel) for radiation transport and detector simulations, mainly based on GEANT 4, GEANT MT but also the newer GEANT5.

Parralell development with specific platforms, mainly OpenMPI.

Senior (more that 5 years) experience in mixed network environments as both supplier and consumer

of these service. Experienced in structured networks (Ethernet and FO). Senior experience in Windows desktop (98, NT to Windows 7) and Windows server editions (NT, 2003, 2008). Senior experience in Unix / Linux administration (worked with all major unix and linux versions). Good knowledge of DTP applications (Photoshop, Corel Draw, Adobe Illustrator etc.) Good knowledge of Office applications.

**Alte competențe** Certified in Linux Server and Desktop Administration

**Permis de conducere** B

## INFORMAȚII SUPLIMENTARE

**Proiecte** One 2016 personal project was the virtualization of GEANT5 particle tracking library using Docker - an common opensource technology - allowing for easier management of new projects using GEANT5 and ROOT6 as a library base. This project was implemented using the infrastructure at the Research Center for Radiation Protection at the Faculty of Physics, University of Bucharest.

The Operations of the Subcritical Assembly of the Faculty of Physics. This project gives an unique overview over the environmental impact given by Nuclear Reactors and provide valuable for furthure projects

Previously, while working in private sector I managed two major projects:

- MyNET Internet Service Provider as Chief Technical.
- TECNET the first romanian EDI platform.

Since 2008 when I started my scientific career I participated as a member to the following projects:

- Grant 62/CP/1 - project managed by prof. univ. dr. Nicolae GHIORDANESCU that financed the Research Center for Radiation Protection infrastructure. The project took place between 2007 and 2009. Project value 1413617 RON with 14 project members
- 761/2007 contract with CNE Cernavoda - managed by prof. univ. dr. Nicolae GHIORDANESCU where I performed computer simulations and dosimetry and radiation protection activities. Project value 375000 RON with 3 project members.
- 25477/2012 contract with CNE Cernavoda - managed by prof. univ. dr. Ionel Lazanu, Within this project I am Contract Responsible. The project value is 471200 RON with 4 project members/

**Conferințe** The Case for Accelerator Driven Nuclear Research Reactors, 2'nd International Conference "Challenges for Sciences and Society in Digital Era", A.Chiroasca, G. Chiroasca, 2015

Enviromental dose rate evaluation within 30 km from the Cernavoda NPP exclusion area, A. Chiroasca, C. Bucur, Dorin Dumitrescu, D. Bobric, A. Nedelcu, Sesiunea anuala de Comunicarii Stiintifice a Facultatii de Fizica 2015

XRF, INAA AND TL INVESTIGATION OF THE LOESS AND PALEO-SOIL SEQUENCES OF THE COSTINESTI (SOUTHERN DOBRUDJA, ROMANIA) LOESS DEPOSIT, O.G. Duliu, L.C. Tugulan, O.A. Culicov, A. Chiroasca, Inga Zincovskaia, M.V. Frontasyeva, D.G. Dumitras, 2nd Conference on Analytical Chemistry - Analitical Chemistry for a better life, 2014

Time Series Analysis for Cyberthreat Detection and Prevention, A. Chiroasca, G. Chiroasca, DeSE'12, 2013, DOI: 10.1109/DeSe.2013.49

TS2a.1 Characterization of the Neutron Fields around Cernavoda NPP. V Cauwels Vanhavere F. D. Dumitrescu R. Tanner Chiroasca L. Hager M Million J Bartz, IRPA 2013, At Glasgow

A multi-analytical study of ancient Romanian pottery, Sesiunea anuala de Comunicarii Stiintifice a Facultatii de Fizica, 2012

LLRMT'12-031 Monte-Carlo Simulation by GEANT4 and GESPECOR of in-situ gamma ray spectrometry measurements, Alecsandru Chiroasca, Rareș Șuvăilă, Octavian Sima

GEANT4 study of the contribution of chereent scattering in gamma-ray spectrometry, A. Chiroasca, O. Sima, Sesiunea anuala de Comunicarii Stiintifice a Facultatii de Fizica, 2012

- Publicații**
- The Case for Accelerator Driven Nuclear Research Reactors, Proceedings of the 2'nd International Conference, "Challenges for Sciences and Society in Digital Era", A.Chiroasca, G. Chiroasca, Vol. I, pp. 55-63
- RADIATION EXPOSURE IN UNDERGROUND LOW ACTIVITY RADIOACTIVE WASTE REPOSITORY, LC Tugulan, FM Dragolici, G Chiroasca, AV Chiroasca, OG Dului ROMANIAN JOURNAL OF PHYSICS 60 (9-10), 1598-1605, 2015
- Time Series Analysis for Cyberthreat Detection and Prevention, A Chiroasca, G Chiroasca Developments in eSystems Engineering (DeSE), 2013 Sixth International. 2013
- Characterisation of neutron fields at Cemavoda NPP, V Cauwels, F Vanhavere, D Dumitrescu, A Chiroasca, L Hager, M Million, et. Al. Radiation protection dosimetry 154 (1), 104-116, 2013
- Monte Carlo simulation by GEANT 4 and GESPECOR of in situ gamma-ray spectrometry measurements, A Chiroasca, R Suvaila, O Sima Applied Radiation and Isotopes 81, 87-91, 2013
- Radiation surveillance and radiation dose control at Cemavoda nuclear power plant, D Dumitrescu, A Chiroasca, OG Dului University" Politehnica" of Bucharest Scientific Bulletin, Series A, 2012
- Citări**
- My Scientific Work gain visibility and was cited in a total of 29 Scientific Papers leading to a Hirsch index of 3 (by April 2016)
- Activități Didactice**
- Am susținut activitate suport pentru laboratoarele mai multor cursuri pe domeniile Fizică Nucleară Aplicată, Computere și Electronică Digitală:
- Sisteme cu Microprocesor - anul 3 licență al Facultății de Matematică a Universității din București, direcția CTI. Laboratorul s-a axat în principal pe programarea elementelor de logică digitală complexă (CPDL) și programarea MCU 8051. Activitatea mea pe această direcție a început în anul universitar 2015-2016.
  - Dozimetrie și Surse de Radiație - Laborator și seminar de detecția radiației folosind tehnicile pasive TLD și tehnici active (camere de ionizare/contori proporționali respectiv spectrometrie cu GeHP) și modelarea transportului radiației folosind coduri de calcul Monte-Carlo. Laboratorul este realizat pentru anul 2 de Master începând cu anul universitar 2014-2015.
  - Electronică Digitală - disciplină de anul 2 a programei de licență a Facultății de Matematică a Universității din București. Am început această activitate în anul universitar 2014-2015.