

Curriculum Vitae

NIKOLAOS N. CHATZISAVVAS

Borned 19/06/1990|Greek and Russian Nationality|Male|Non-married

CONTACT INFO

Address : Thrakis 34, Elliniko Athens- Greece, P.C. 16777|

Tel.: +30 697 66 17 192

email: nikolaos.chatzisavvas@gmail.com

EDUCATION

Technological Education Institute of Athens

Master of Science

Electronic Engineering, 2013-2016

Grade 8.30

Technological Education Institute of Piraeus

Bachelor of Engineering

Electronic Computer Systems Engineer, 2008-2013

Grade 7.55

CURRENT STATUS

Current research activities involve the following fields:

(a) Monte Carlo modelling of *medical imaging scintillators* via (b1) custom codes, (b2) EGSnrcMP and (b3) GATE

(b) Monte Carlo modelling of *Radiotherapy Medical Accelerators* with BeamNRC

(c) x-ray and optical measurements for the *evaluation* of new medical imaging scintillators

(d) measurements and modelling of (a1) environmental *radon* and *radon progeny* indoors, (a2) *electromagnetic radiation* (EMR) emphasising on mobile phones, DECTs and more specifically in the frequency range 100MHz-3GHz, (a3) background *gamma radiation* of buildings and soil (a4)

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artificial *air pollutants*, such as, CO_x, NO_x, SO_x, O₃, VOCs (Volatile Organic Compounds) (a5) extensive environmental Monte Carlo modelling and (a6) Utilisation of environmental platforms CONTAM, CONTAMW and RISK.

PUBLICATIONS

1 full papers in International **peer-reviewed Journals** in the field of *Medical Imaging*

11 publications in Conference Proceedings in the fields of *Medical Imaging* and *Environmental Electromagnetic Radiations(2012 & 2013)*

In specific the publications are as follows:

(a) *Papers*

1. D.Nikolopoulos, S. Kottou, **N. Chatzisavvas**, X Argyriou, E. Vlamakis, P Yannakopoulos, A Louizi, "A GATE Simulation Study of the Siemens Biograph DUO PET/CT System, Open Journal of Radiology, 2013 (in press)

(b) *Conference proceedings*

2. **N. Chatzisavvas**, T. Sevvos, E. Vlamakis, A. A. Fotopoulos, X. Argyriou, X. Tsantilas, D. Nikolopoulos, P.H. Yannakopoulos, S. Kottou, A. Louizi, Impact of detector's thickness on imaging characteristics of the Siemens Biograph DUO PET/CT with GATE, eRA-7 International Scientific Conference, Technological Education Institute of Piraeus, Greece, 2012 September 28.

3. T. Sevvos, A. A. Fotopoulos, E. Vlamakis, X. Argyriou, **N. Chatzisavvas**, A. Efdaimon, K. Vagennas, P.H. Yannakopoulos, I. Valais, I. Kandarakis, D. Nikolopoulos, Monte Carlo comparison study of the radiation absorption of scintillators for use in Diagnostic Radiology and Nuclear Medicine Applications, eRA-7 International Scientific Conference, Technological Education Institute of Piraeus, Greece, 2012 September 28.

4. E. Vlamakis, X. Argyriou, T. Sevvos, A. A. Fotopoulos, **N. Chatzisavvas** P.H. Yannakopoulos, N. Kalyvas, I. Valais, I. Kandarakis, D. Nikolopoulos, Semi-empirical Monte Carlo optical-gain modeling of Nuclear Imaging scintillators, eRA-7 International Scientific Conference, Technological Education Institute of Piraeus, Greece, 2012 September 28,.

5. A. A. Fotopoulos, E. Petraki, E. Vlamakis, X. Argyriou, T. Sevvos, **N. Chatzisavvas**, A. Zisos, C. Nomicos, A. Louizi, J. Stonham, P.H. Yannakopoulos, D. Nikolopoulos , Similarities in the self-organised critical characteristics between soil radon and MHz electromagnetic disturbances during a very seismic period in Greece,

eRA-7 International Scientific Conference, Technological Education Institute of Piraeus, Greece, 2012 September 28.

6. A. A. Fotopoulos, E. Petraki, E. Vlamakis, X. Argyriou, T. Sevvos, **N. Chatzisavvas**, A. Zisos, C. Nomicos, A. Louizi, J. Stonham, P.H. Yannakopoulos, D. Nikolopoulos Environmental monitoring of soil radon in a very tectonic area in South West Greece, eRA-7 International Scientific Conference, Technological Education Institute of Piraeus, Greece, 2012 September 28,.

7. T. Sevvos, X. Argyriou, **N. Chatzisavvas**, N. Temenos, Y. Chaldeos, S. Filtisakos, N. Gorgolis, S. Potozi, E. Petraki, D. Koulougliotis, S. Kottou, P. Yannakopoulos, D. Nikolopoulos, A. Zisos Study of the response of open CR-39 detector to radon and progeny by Monte Carlo simulation with SRIM, eRA-8 International Scientific Conference, Technological Education Institute of Piraeus, Greece, 2013

8. X. Argyriou, T. Sevvos, **N. Chatzisavvas**, N. Temenos, Y. Chaldeos, S. Filtisakos, N. Gorgolis, S. Potozi, E. Petraki, D. Koulougliotis, S. Kottou, P. Yannakopoulos, D. Nikolopoulos, A. Zisos, Long-term estimation of radon's equilibrium factor and radon progeny unattached fraction with SSNTDs through measurements and Monte-Carlo modeling, eRA-8 International Scientific Conference, Technological Education Institute of Piraeus, Greece, 2013

9. D. Nikolopoulos, E. Petraki, D. Koulougliotis, S. Kottou, A. Louizi, P. Yannakopoulos, E. Vogianis, S. Filtisakos, N. Gorgolis, X. Argyriou, T. Sevvos, N. Temenos, Y. Chaldeos, S. Potozi, G. Kefalas, R. S. Lorilla, **N. Chatzisavvas**, A. Zisos, Human radiation risk of due to radon and progeny: results from extended active measurements in Attica (Greece), eRA-8 International Scientific Conference, Technological Education Institute of Piraeus, Greece, 2013

10. D. Nikolopoulos, E. Petraki, T. Sevvos, Y. Chaldeos, X. Argyriou, S. Filtisakos, N. Gorgolis, N. Temenos, G. Kefalas, R. S. Lorilla, S. Potozi, **N. Chatzisavvas**, D. Koulougliotis, S. Kottou, A. Louizi, P. Yannakopoulos, A. Zisos, Factors affecting indoor radon and progeny concentration variations in Attica (Greece), eRA-8 International Scientific Conference, Technological Education Institute of Piraeus, Greece, 2013

11. N. Chatzisavvas, D. Nikolopoulos , I. Valais, N. Kalyvas, X. Argyriou, T. Sevvos, S. Kottou, P. Yannakopoulos, I. Kandarakis, Gate simulation of the Biograph 2 PET/CT scanner, eRA-8 International Scientific Conference, Technological Education Institute of Piraeus, Greece, 2013

THESIS

Study of Medical Imaging Applications through GATE/Geant4. 2013, TEI of Piraeus, Greece

LANGUAGES

English (Lower)

Russian (native)

Greek (native)

HONORS & AWARDS

1. 2nd Place in IEEE Region 8(Europe, Africa & M. East) Student Branches' website contest

December 2011

2. Scholarship Award for distinguishing in studies and ethics in the Department of Electronic Computer Systems Engineering from Greek State Scholarships Foundation

Period 2009 - 2010

3. Scholarship Award for distinguishing in studies and ethics in the Department of Electronic Computer Systems Engineering from Greek State Scholarships Foundation

Period 2010 - 2011

EXPERIENCE

1. *Software Developer* at Department of Physics, Chemistry and Material Science Sept. 2009 – Aug. 2010, **Develop a Monte Carlo Approach in Photon Scattering in C language, application of EGSnrCMP platform and GATE.**
2. *Assistant Project Manager* at Department of Physics, Chemistry and Material Science Dec. 2009 – March 2010 Project “IndrAQ entitled A Multidisciplinary study of air quality with emphasis indoors”,
3. *IEEE Student Branch TEI Piraeus, Founding member*, March 2011 – January 2012
4. *IEEE Student Branch TEI Piraeus, Research & Development Committee*, 2011 – 2013
5. “i - ΤΕΠΠ ΥΠΗΡΕΣΙΕΣ ΠΛΗΡΟΦΟΡΙΚΗΣ - ΕΡΓΑΣΤΗΡΙΟ ΕΛΕΥΘΕΡΩΝ ΣΠΟΥΔΩΝ”, **June 2012 – January 2013 Developing in KendoUI , Orchard CMS and PHP .**

SKILLS**1.Gate Geant4 (Advanced, 3 years’ experience)**

Geant4 is a toolkit is a platform for "the simulation of the passage of particles through matter," using Monte Carlo methods. It is the successor of the GEANT series of software toolkits developed by CERN. GATE/GEANT is a Monte Carlo code dedicated to nuclear medicine that allows calculation of the dose to organs of voxel phantoms.

2.Matlab (Advanced, 3 years’ experience)**3.Java (Advanced, 3 years’ experience)****4.Linux (Advanced , 4 years’ experience)**

Arch linux , Debian , Ubuntu , Fedora, Centos and more distributions. Very good experience on bash shell scripting.

5.PHP (Advanced, 3 years’ experience)

Wordpress CMS on PHP and some experience with Laravel Framework .

6. Web Design (Intermediate, 2 year experience)

HTML5-CSS3-Javascript with KendoUI Framework

7. C/C++ (Advanced, 3 years' experience)

Algorithms and C/C++ experience with GEANT4

8. Microsoft Office (Expert, 5 years' experience)

Many projects and a lot of experience with Office since at TEI Piraeus I had a lot of presentations and so many documents to turn in.

9. Web Development (Beginner , 1 year experience)

Orchard CMS and Developing.

MVC modelling (Laravel - PHP).

Database Modelling

10. NetWorking (Beginner, 1 year experience)**11. Personal Strength and Conditioning Trainer (Advanced 4 years' experience)**

Personal experience of losing 55Kg in 7 months, training cardio and experience with Mix Martial Arts .

HOBIES

Mix Martial Arts

Guitar

Chess