

## PERSONAL INFORMATION

## Cătălin Neacșu



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## WORK EXPERIENCE

October 2020 – Present

## Physicist (part time)

Horia Hulubei National Institute for R&D in Physics and Nuclear Engineering (IFIN-HH)  
30 Reactorului Street, Bucharest - Măgurele, ROMANIA

Development of radiation detectors

**Business or sector** Nuclear research

June 2018 – Present

## Sr. Technical Consultant

Andak Consulting SRL

6<sup>th</sup> District Bucharest(Romania)

- Hardware engineering, Mechanical design, Thermal analysis, PCB design
- Cadence Allegro SKILL customization
- Project and resource management
- Business development and administration

**Business or sector** Semiconductors

September 2013 – July 2018

## Technical Consultant

Neacsu Catalin PFA

6<sup>th</sup> District Bucharest(Romania)

- Hardware engineering, Mechanical design, Thermal analysis, PCB design
- Cadence Allegro SKILL customization
- Project management

**Business or sector** Semiconductors

February 2013 – August 2018

## Shift Leader

Procter and Gamble

Urlați, Prahova (Romania)

- Lead a team of 20 people

**Business or sector** Manufacturing

**February 2011 – January 2013 Department Manager (Packaging Materials)**

Procter and Gamble  
Urlați, Prahova (Romania)

- Lead a team of 3 people
- Project management
- Standardization and documentation
- Commissioning and maintenance of molds and materials
- Training

**October 2006 – January 2011 Team leader**

Design Solutions Inc  
Paul Greceanu street, 1<sup>st</sup> District Bucharest(Romania)

- I led 2 teams of 5 people each
- Business development

**Business or sector** Semiconductors

**Nov 2005 – October 2006 PCB Designer**

Alvarion LTD  
Otopeni, Ilfov(Romania)

I was responsible for designing complex PCBs with RF and Digital signals in the same system using Mentor Graphics tools.

**Business or sector** Communications

**Nov 2004 – October 2005 PCB Designer**

Design Solutions Inc  
Splaiul Unirii, 1<sup>st</sup> District Bucharest(Romania)

PCB Design of for top 10 Semiconductor Industry players, using Cadence Allegro, PADS, Mentor Graphics Board Station and Expedition.

**Business or sector** Communications

**EDUCATION AND TRAINING****2018–present Doctoral studies in Applied Sciences(Physics)**

Politehnica University of Bucharest, Romania in collaboration with Horia Hulubei National institute for R&D in Physics and Nuclear Engineering

**2007–2011 Bachelor in Civil Engineering (Bridges)**

Technical University of Civil engineering, Bucharest, Romania

**2002–2004 Master of Science in Electronics**

University of Bucharest, Romania

**1997–2001 Bachelor of Science in Physics**

University of Bucharest, Romania

**PERSONAL SKILLS**

Mother tongue Romanian

**Other languages**

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C1	C2	B2	B2	B2
French	A1	A1	A1	A1	A1

Levels: A1 and A2: Basic user – B1 and B2: Independent user – C1 and C2: Proficient user  
[Common European Framework of Reference for Languages](#)

**Communication skills**

- team work: I've been working in a factory with 300+ people in a support department where good communication was a must. I've been in the middle of the organisation, having to work with roles ranging from line operators to plant managers.
- In the same factory mentioned above, the CORE departments were always pushing from all directions and mitigation was always the key for success.

**Organisational / managerial skills**

- During the last 15 years I constantly led people and interacted with customers (internal or external). I managed teams, processes and systems everywhere I worked.
- I am also able to work alone and proactively identify problems and solutions to them.

**Digital competences**

SELF-ASSESSMENT				
Information Processing	Communication	Content creation	Safety	Problem solving
Proficient user	Proficient user	Proficient user	Independent user	Proficient user

[Digital competences - Self-assessment grid](#)

**Computer skills**

- Proficient with: Cadence Allegro, Librarian, Orcad CIS, SKILL (customization for Allegro), Solidworks, Flotherm (Mentor Graphics for Thermal Simulation), LTSpice, AutoCAD, Excel
- Past experience with Mentor Graphics: PADS, Board Station and Expedition, AutoCAD 3D, MathCAD
- Independent User: Python, Mathematica, Octave, VHDL, LINUX, System administration, Spice, Vivado, Project Libre, OpenProject

**Other skills**

Guitar player, puzzles, technology, hiking, photography, can do attitude, problem solver

**Driving licence**

B

**PUBLICATIONS**

- [1] C. Mihai, G. Pascovici, G. Ciocan, C. Costache, V. Karayonchev, A. Lungu, N. Mărginean, R.E. Mihai, C. Neacșu, J.-M. Régis, A. Turturica, S. Ujeniuc, and A. Vasiliu. "Development of large area Silicon Photomultipliers arrays for gamma-ray spectroscopy applications". In: *Nuclear Instruments and Methods in Physics Research Section A: Accelerators, Spectrometers, Detectors and Associated Equipment* 953 (2020), p. 163263.
- [2] G. Pascovici, C. Mihai, C. Neacșu, S. Ujeniuc, R. Mihai, C. Costache, N. Mărginean, A. Turturică, G. Ciocan, Jean-Marc Régis, and V. Karayonchev. "The Use of Micro-Technologies in Nuclear Instruments, the Development of a Set of Modern Gamma-Ray Detectors Based on SiPM Arrays". In: *NANOMATERIALS – FUNCTIONAL PROPERTIES AND APPLICATIONS*. Vol. 28. Editura Academiei Române, 2020, pp. 66–84.
- [3] Cătălin Neacșu and Căta-Danil Gheorghe. "Scintillator's optical path contribution to signal rise time of SiPM detectors". In: *U.P.B. Sci. Bull., Series A*. Vol. 83, Iss 3. 2021.

- [4] Cătălin Neacșu, Răzvan Lică, George Pascovici, Constantin Mihai, and Sebastian Rothe. "A miniaturized low-power SiPM-based  $\beta$  detector for the ISOLDE Fast Tape-station". In: *Nuclear Instruments and Methods in Physics Research Section A: Accelerators, Spectrometers, Detectors and Associated Equipment* (2022), p. 166213. URL: <https://www.sciencedirect.com/science/article/pii/S0168900221010688>.