



## Europass Curriculum Vitae

### Personal information

First names / Surname **Tudor Luca Mitran**  
E-mail tudor.mitran@nipne.ro  
Nationality Romanian  
Date of birth 26.01.1987  
Gender male

### Work experience

**13.01.2016 – present** - Horia Hulubei National Institute for R&D in Physics and Nuclear Engineering (IFIN-HH) (<http://www.nipne.ro/>) - Scientific Researcher III

- Numerical simulations and optimization problems, statistical analysis and modelling, *ab initio* modelling of nanostructures, devices and materials, numerical simulations of biological materials and the study of complex systems

**01.02.2009 – 12.01.2016** - University of Bucharest, Faculty of Physics, “Materials and Devices for Electronics and Optoelectronics” Research Center (<http://www.fizica.unibuc.ro/mdeo/Main.asp>) – Research Assistant and part-time faculty position

- Numerical simulations and optimization problems, statistical analysis and modelling, *ab initio* modelling of nanostructures, devices and materials
- SEM and AFM imagery, production and characterization of thin films and thin film based photovoltaic cells
- Seminars and lectures: Introduction to parallel programming (C, MPI-C), Introduction to numerical computing (MIPS architecture and assembly code, Verilog tutorial, introductory concepts of information theory). Microscopy methods and Scanning Electron Microscopy analysis.

**15.07.2008-15.01.2009** – National Institute of Research & Development for Optoelectronics (<http://www.inoe.inoe.ro/>) – Research Assistant

- Materials analysis, AFM imagery and RF deposition of thin films

### Education and training

10.2010 - 09.2013 - University of Bucharest, Faculty of Physics – Doctor of Philosophy in Physics (including an 8-month research stage in Germany, University of Oldenburg)

10.2008 - 06.2010 - University of Bucharest, Faculty of Physics – Master's degree in Computational Physics

10.2005 - 06.2008 - University of Bucharest, Faculty of Physics – Bachelor's degree in Physics

## **Personal skills and competences**

Mother tongue	Romanian
Other languages	English – Cambridge Certificate in Advanced English (CAE)
Technical skills and competences	Scanning electron microscopy (SEM) , e-beam lithography, and atomic force microscopy (AFM)
Computer skills and competences	Experienced with: C, MPI-C, parallel programming, debugging (gdb, Valgrind), profiling (gprof), Python, Bash Limited experience with: Assembler (MIPS), Verilog User skills: Linux/Windows, LaTeX, Open Office/Microsoft Office
Communication and organisational skills	Good communication and organisational skills gained by working in a research team, giving multiple scientific presentations and through teaching experience.
Driving license	A, B