

Thomas Dehaeze

Curriculum vitae



Education

- 2017 – **Philosophiæ doctor (PhD)**, *ULB, Liège*.
Development of mechatronics concepts and their application for a Nano-positioning endstation
- 2016 – 2017 **Master of Science (MSc) in Embedded Systems**, *UCBL, Lyon (69)*.
Methods of fabrication of micro-systems, study of multi-core architectures and FPGA, CAD
- 2014 – 2017 **Master of Science (MSc) in Engineering**, *École Centrale de Lyon (69)*.
Major in electronics, embedded systems, automatics, machine learning
- 2012 – 2014 **BSc & 1st year of MSc in physics**, *École Normale Supérieure, Lyon (69)*.
Science of Matter, Signal processing, Python programming, Mathematics
- 2010 – 2012 **2-year undergrad. intensive course in math and physics**, *Lycée du Parc, Lyon*.
2010 **French equivalent to A-level with major in Sciences**, *Lycée Armorin, France*.

Working Experience

- Nov. 2017 – present **European Synchrotron Radiation Facility (ESRF)**, *Grenoble (38)*.
Development of mechatronics concepts for nano-positioning and active stabilisation stage: 6DoF Stewart Platform, 6DoF online metrology system and the associated control system
- April – Sept. 2017 **Asygn, Analog System Design**, *Grenoble (38)*.
Study of an high performance MEMS gyroscope. Identification and system modeling, controller synthesis using H_∞ loop-shaping and implementation of control laws on embedded system
- March – July 2016 **Rtone, firm of engineering consultants specialising in IoT**, *Lyon (69)*.
Embedded development (C/C++/lua on Cortex m4 and stm32) for IoT applications.
Development of a web application and a mobile application with the design of the data model
- Sept. 2015 **Relief Applications, tech startup for the humanitarians**, *Rome (Italy)*.
Jan. 2016 Developpement of a web platform (Symfony2), a mobile application (Ionic) and a REST API
- May – July 2015 **8fablab, digital fabrication laboratory**, *Crest (26)*.
Making a testbed for acoustic and electrical measurements of loudspeakers.
Design of a loudspeaker enclosure and its realization with digital manufacturing tools
- May – July 2014 **National Centre for Scientific Research**, *Lyon (69)*.
Design and assembly of an experimental device in order to put under stress a silicon beam under the action of an electric field, all under vacuum and at low temperatures
- June – July 2013 **National Centre for Scientific Research**, *Lyon (69)*.
Design and assembly of an optical bench followed by image processing and data analysis

Computer knowledge

- Scientific MatLab, Python, FEM softwares, CAO softwares
- Embedded C, C++, Prototyping (PCB, Arduino, RaspberryPi, ...)
- Web Frontend (MVC), Backend, API, Databases (no)SQL
- DevOps Unix, Versionning (Git), Script (bash, ...)

Languages

- French Mother tongue
- English Working language (TOELF iBT 83)

Interests

- Digital Fab. Using of CNC machines: 3D printer, Laser cutter, Milling machine
- Electronic Many projects using the Arduino and the RaspberryPi
- Sports Tennis, Table Tennis, Hiking