

Curriculum Vitae

Marion Badi-Dubois

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Date of birth: 07/10/1993
Nationality: Swiss



EDUCATION

- 2014-today **Master in Bioengineering** - Swiss Federal Institute of Technology, Lausanne, Switzerland
- 2011-2014 **Bachelor in Life Sciences and Technology** - Swiss Federal Institute of Technology, Lausanne, Switzerland
- 2008-2011 **French Baccalaureate**, Scientific option - Passed with high honours “*Félicitations du jury*”
Lycée Charles Nodier, Dole, France

RESEARCH EXPERIENCE

- February-June 2015 **Project – Translational neural engineering lab**, EPFL, Switzerland
Head of Laboratory: Prof. Silvestro Micera
Programming an interface to control a robotic system used in paradigms for rehabilitation of grasping, in patients who suffered from traumatic events or neurodegenerative diseases and are not able to grasp and manipulate objects anymore.
- July-August 2014 **Internship at CERN, Geneva, Switzerland**
Head of Laboratory: Dr. Paul Lecoq
Participation to a “Crystal Clear” Collaboration’s project on development of new scintillators for particle physics experiments, medical imaging and industrial applications. Experimental work and theoretical analysis to achieve higher spatial resolution in positron emission tomography. Ability to participate to teamwork (European partnership) and meet deadlines.
- 2014 **Bachelor thesis - Chair in non-invasive brain-machine interface**, EPFL, Switzerland
Head of Laboratory: Prof. José del R. Millán
Brain-computer interface for automated error correction. Development of a classification method to recognize individual ERNs in self-paced choice task using physiological data (EEG). Ability to work in autonomy on challenging tasks.

OTHER EXPERIENCES

- 2014-today **Member of Salon des Sciences et technologies de Lausanne (STIL) –EPFL**
Responsibilities: - **Operation’s manager:** seeking investors, contacting companies and laboratories to invite them to the event
- Organisation of conferences
- 2012-today **Member of Ingénieurs du Monde-EPFL**
Committee promoting North-South scientific cooperation and organizing internships in Southern countries for future engineers.
Responsibilities: - Finding new partnerships with firms and foundations
- **Budget manager and Fundraiser**
- 2013-today **Teaching assistant**
Analysis I course for Life Sciences students, EPFL
Tutoring in Sciences (mathematics, biochemistry, and physics) for high school and bachelor students
- 2013 **English School**, 2 months, Intensive program, London, UK
- 2012 **Hospital La Vallée de Joux, Switzerland**, 1 month, Animation and patients assistance

LANGUAGES AND SKILLS

- Languages **French:** Native, **English:** Fluent, C1 (Common European language Framework), **German:** Basics
Russian: Basics
- IT skills Matlab, C++, html, LabVIEW, ROOT, Excel, Word, PowerPoint, for Windows and Mac environments
- Engineering skills Mathematics, Physics, Electrical systems, Fluid mechanics, Signal processing, Biomaterials, BioMEMS
Neuroengineering, Neuroprosthetics, Biomicroscopy, tissue engineering, Brain-Computer interface
- Life Sciences skills Neurosciences, Molecular Biology, Immunology, Physiology, Microbiology, Regenerative Medicine

PERSONAL INTERESTS

- Interests Tennis (competition level), Ski, Natation, trek, Piano