



"Having obtained my PhD degree from the University of Florence, I possess strong technical qualities and an experience as teaching assistant of five years. Coupled with excellent communication skills and enthusiasm as personal assets, I am looking for a position with new challenges where I could take advantage of my knowledge and skills."

Joël Dumoulin

31 years old
Swiss

Rte du Comptoir 19
1700 Fribourg
Switzerland

joel@dumoulin.ch
<http://joel.dumoulin.ch>

Languages

French: mother tongue

English: excellent skills, both written and oral

German: good skills, both written and oral

Italian: good oral skills

Tag cloud

Android AngularJS
C C# C++ Git
HTML5 J2EE
Java JavaFX
JavaScript Linux
OSX .Net NodeJS
OpenCV owl php
Python Ruby SQL
SVM UML Windows
XAML XML

Activities / interests

Photography, fitness, snowboard, squash

Internet, hardware and software news, mobile world, user interface evolution

Professional experience

May 2011-Today: Scientific collaborator at School of Engineering and Architecture of Fribourg

Teaching assistant for computer science courses in Bachelor and Master degrees in the following domains: information systems, human-computer interactions, algorithmic and data structures, machine learning and pattern recognition.

Project management and participation in various research projects, e.g., mCARS (HES-SO), Memories (Hasler Foundation).

Supervision of Bachelor and Master thesis, and other students' projects.

2005-2006: Full year internship at Hydro-Exploitation SA, Sion
Employee of the IT department, application development, user support.

Education and training

2012-2015: Doctor of Philosophy in Computer Engineering, Multimedia and Telecommunication at University of Florence, Italy

PhD Thesis: Emotion recognition in multimedia content and creation of an empathic television in order to improve television user experiences.

2013-2015: Diploma of Advanced Studies in Didactics (30 ECTS) at University of Fribourg

Graduate work: Improvement of a third year Bachelor course.

2009-2011: Master of Science HES-SO in Engineering, major in Information and Communication Technologies at University of Applied Sciences Western Switzerland

Master thesis: Brain Computer Interface research - Gesture recognition of simple hands movement using a brain lightweight headset for driving an electric Smart Wheelchair based on the user's brain activity (C#, Open-VIBE, SVM).

2006-2009: Bachelor of Science HES-SO in Computer Science at School of Engineering and Architecture of Fribourg

Graduate work: Design and implementation of a semi-virtual pool game on an interactive table (C#, XAML, Open Dynamics Engine).

2002-2006: Swiss Federal Certificate (CFC + Maturité technique) in Computer Science at Ecole des Métiers du Valais (EMVS)

Graduate work: Design and implementation of the stock management system for the printer supplies of the company (ASP.NET, MS SQL Server).

Specific skills

- Setting up research projects, IT project management, agile methodologies
- User interfaces and information visualization research
- Algorithmic and data structures
- Computer vision, machine learning and pattern recognition, multimedia processing and automatic annotation, affective modeling and emotions recognition
- Teaching, supervising students
- Augmented reality, virtual reality, semi-virtual reality
- Architecture and software development experience in .Net, J2EE and Python
- Rich Internet Application development, HTML5, JavaScript, RESTful
- Mobile development
- Operating systems, databases, network

Main publications

- J. Dumoulin, D. Affi, E. Mugellini, O. Abou Khaled. "eRS: A System to Facilitate Emotion Recognition in Movies", In MM '15 Proc. of the 23rd ACM Int. Conf. on Multimedia, pages 697-700, Brisbane, Australia. 2015
- J. Dumoulin, D. Affi, E. Mugellini, O. Abou Khaled, M. Bertini, A. Del Bimbo. "Affect Recognition in a Realistic Movie Dataset Using a Hierarchical Approach". In ASM '15 Proc. of the 1st Int. Workshop on Affect & Sentiment in Multimedia, pages 15-20. Brisbane, Australia. 2015
- D. Affi, J. Dumoulin, M. Bertini, E. Mugellini, O. Abou Khaled, A. Del Bimbo. "SensiTV: Smart EmotioNal System for Impaired People's TV. In TVX'15 Proc. Of the ACM Int. Conf. on Interactive Experiences for TV and Online Video, pages 125-130, Brussels, Belgium. 2015
- J. Dumoulin, M. Sokhn, E. Mugellini, O. Abou Khaled, M. Bertini, A. Del Bimbo. "Empathic TV Experiences for Visually and Hearing Impaired People Using Arousal Modeling", In EmpaTeX 2014, 1st Int. workshop on Empathic Television Experiences at ACM TVX 2014, Newcastle, UK. 2014
- J. Dumoulin, E. Mugellini, O. Abou Khaled, M. Bertini, A. Del Bimbo. "Towards Temporal Saliency Detection: Better Video Understanding for Richer TV Experiences", In ICDS 2014, The Eighth International Conference on Digital Society, pages 199–202, Barcelona, Spain. 2014
- Francesco Carrino, Joël Dumoulin, et al., "A self-paced BCI system to control an electric wheelchair – Evaluation of a commercial, low-cost EEG device", The 3rd IEEE Biosignals and Biorobotics conference (ISSNIP), Manaus, Brazil. 2012.