

CONTACT
INFORMATION

Place du Petit-Saint-Jean 13
1700 Fribourg
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30, married, Swiss nationality
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QUALIFICATIONS
AND INTERESTS

Image analysis, image processing, pattern recognition, computer vision, machine learning, artificial intelligence, 2D/3D face models, biomedical engineering

EDUCATION

Ecole Polytechnique Fédérale de Lausanne (EPFL), Switzerland

Ph.D., Electrical Engineering, expected spring 2017

- Thesis Topic: Facial Images Analysis Applications in Medical Domains
- Adviser: Prof. Jean-Philippe Thiran

M.S., Electrical Engineering, July 2012 GPA: 5.56 (6.0 scale)

- Thesis Topic: Difficult Intubation Assessment from Video
- Area of Study: Major in **information technologies** and minor in **biomedical technologies**

PROFESSIONAL
EXPERIENCE

Ecole Polytechnique Fédérale de Lausanne (EPFL), Switzerland

Research assistant

September 2012 to present

- Research topic in Computer Vision with application to 2D and 3D face analysis and modeling.
- Supervision of graduate and undergraduate students in electrical engineering and computer science in projects related to facial images analysis.

Teaching assistant

September 2008 to June 2011

- Teaching Assistant for the courses and labs: Introduction to electrical engineering, Measurement Systems, Programming (C++)

IBM Research, Zurich, Switzerland

Research intern

September 2015 to February 2016

- Development of a C++ framework using image processing and machine learning techniques to automatically extract numerical data from scientific charts images.

ABB, Corporate Research Center, Bangalore, India

Intern

July 2010 to September 2010

- Worked on Real-time simulation of electrical systems
- Performed simulations and explored advanced concepts of C++ (expression templates and template meta-programming) to reduce the use of big temporary objects at execution time in order to achieve real-time performances.

SKILLS

Computer Programming:

- C, C++, CMake, OpenCV library, Python, Scikit-learn and NumPy libraries, MATLAB, Bash, \LaTeX , \BibTeX

Languages:

- French: mother tongue
- English: Excellent knowledge (professional language since 2010)
- Swedish: Good knowledge (exchange year in Sweden, 2002-2003)
- German: School knowledge (9 years courses)

REFEREED JOURNAL PUBLICATIONS	<p>[1] G. L. Cuendet, P. Schoettker, A. Yüce, M. Sorci, H. Gao, C. Perruchoud, and J.-P. Thiran. Facial image analysis for fully automatic prediction of difficult endotracheal intubation. <i>IEEE Transactions on Biomedical Engineering</i>, vol. 63, pp. 328-339, Feb. 2016. doi:10.1109/TBME.2015.2457032</p> <p>[2] P. Schoettker, G. L. Cuendet, J.-P. Thiran, M. Sorci, A. Yüce, and C. Perruchoud. Automatic Prediction of Difficult Intubation from Video. <i>European Journal of Anaesthesiology (EJA)</i>, p. 269, 2013.</p>
CONFERENCE PUBLICATIONS	<p>[3] G. L. Cuendet, A. Yüce, J.-P. Thiran, M. Sorci, P. Schoettker and C. Perruchoud. Automatic Mallampati Classification Using Active Appearance Models. <i>ICPR International Workshop on Pattern Recognition for Healthcare Analytics</i>, 2012.</p> <p>[4] F. I. Karahanoglu, G. L. Cuendet, J. Britz, D. V. D. Ville and C. Michel. Multi-dimensional Random Walk Embedding to Reveal the EEG Microstates Dynamics. <i>Proceedings of the Seventh Alpine Brain Imaging Meeting</i>, p. 65, 2012.</p>
PATENTS	<p>[5] P. Schoettker, G. L. Cuendet, C. Perruchoud, M. Sorci and J.-P. Thiran. Difficult intubation or ventilation prediction system. Patent pending at the European Patent Office, October 2013.</p>
AWARDS	<hr/> <p>Institute for Pure & Applied Mathematics (IPAM), UCLA, Los Angeles, USA</p> <ul style="list-style-type: none"> • Full grant for attending the Graduate Summer School: Computer Vision, Summer 2013
EXTRA- CURRICULAR	<hr/> <p>Certificat amateur de violon (certificate of violin amateur studies) June 2009 Conservatoire de Fribourg, Switzerland</p> <p>Chamber music 2009 to present</p> <ul style="list-style-type: none"> • Violinist of the "Chromatique" piano trio. We perform public concerts in the french speaking part of Switzerland, playing the classical and romantic repertoire. • Chamber music master classes in Blonay with amongst others: Paul Cocker, Joel Marosi or the Trio Lenitas. <p>Orchestra musician (OSUL) 2012 to present</p> <ul style="list-style-type: none"> • Violinist in the Lausanne symphonic university orchestra. The orchestra gives 3 concerts per year and plays the romantic and modern repertoire for large symphonic orchestra.
REFERENCES	<hr/> <p>Available upon request.</p>