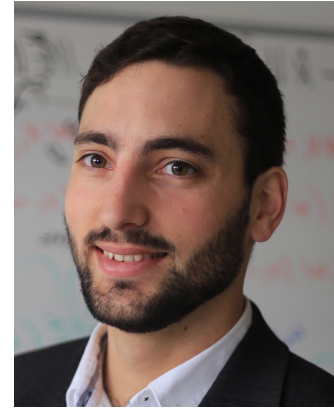


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Date of birth: 16/09/1987
Nationality: Swiss
Languages: English, French, German, Spanish



Summary

Objective	Looking for a job involving challenging problems solving , machine learning and data science.
Profile	Research scientist with experience in machine learning, optimization, graph theory, data science and deep learning .

Technical skills

Data Science	Data modeling, signal processing, graph-based data science, data mining, probabilistic modeling
Machine Learning	Supervised and unsupervised learning, recommendation systems, graph-based learning, deep learning, statistics
Optimization	Large-scale convex and non-convex optimization, proximal methods, neural networks, algorithm design
Programming	MATLAB, Python, C/C++, Git
Web Development	PHP, MySQL, HTML, CSS, Joomla

Working experience

04. 2013 - Today	Ph.D. at LTS2 - EPFL (Ecole Polytechnique Fédérale de Lausanne) I do research and develop graph based algorithms used for data processing and machine learning with specialization in: <ul style="list-style-type: none">• Statistical data modeling based on graphs• Algorithm speed and scalability
09. 2014 06. 2015	Summer school organizer: "Key Insights on Networks and Graphs" A summer school on spectral graph theory and distributed computing <ul style="list-style-type: none">• Team leader and coordinator
09. 2012 - 03. 2013	Research Scientist in ARI (Acoustic Research Institute) <ul style="list-style-type: none">• Proposed an algorithm for fast phase reconstruction• Developed a system for automatic audio reconstruction
06. 2009 - 08. 2009	Internship at Imperial College London (IAESTE) <ul style="list-style-type: none">• Development of a wireless communication system

Prizes

2010 - 2011 **Excellence scholarship**, award granted to a maximum of one student per section, based mostly on academic performance.

Education

2013 - Today **EPFL Ph.D.** in signal processing with graph-based applications in machine learning.

2010 - 2012 **EPFL Master of Science** in Electrical and Electronic Engineering (Specialisation in Information Technologies) **Ranking 3rd**, (out of 42) with a **GPA of 5.80/6**

2010 - 2012 **EPFL Minor Diploma** in Energy with a GPA of 5.61/6

2007 - 2010 **EPFL Bachelor of Science** in Electrical and Electronic Engineering, awarded with the excellence scholarship (GPA of 5.52/6)

2002 - 2007 **High School Diploma** "Lycée Collège de la Royale Abbaye de Saint-Maurice" (Specialisation in Physics and Mathematics)

Software contributions

UNLocBoX I am the **founder** and the **lead contributor** (80% of the code-base) of an **open-source convex optimization library**. I have designed the system and implemented many **state-of-the-art methods**. Its main advantage over other libraries is that it combines **high performance** with ease of use, transparency and modularity. Link: <https://lts2.epfl.ch/unlocbox/>

GSPBox I am **founder and lead contributor** (50% of the code-base) of the **only library available online** to perform graph-based signal processing. GSPBox contains various **large scale** machine learning algorithms for semi-supervised learning, filtering and network inference. Link: <https://lts2.epfl.ch/gsp/>

Audio Inpainting I am the designer and the main contributor of the **only algorithm able to automatically recover long missing parts of a song**. The algorithm first captures the music structure and then finds an appropriate replacement for the missing part. Demo: <https://lts2.epfl.ch/web-audio-inpainting/>

Language Skills

French Mother tongue

English C1 (Good operational command)

German B2 (Generally effective command)

Spanish A2 (Basic command)

Extra-Curricular Activities

2013 - Today Tango (Argentine) dancing

2007 - 2014 Member and committee member at "Voix de Lausanne" (choir)

2005 - 2012 Ski instructor at the Swiss Ski School of Verbier (ESSV) (First Degree of Swiss Ski Patent)

2001 - 2007 Trainer in Basketball Club Bagnes