Maxime Baelde

Data Scientist

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 LinkedIn profile
 Github repo



Work experiences

October 2015 **R&D Engineer, Data Scientist**, A-VOLUTE, Villeneuve d'Ascq.

Today Develop algorithms related to probabilities, statistics, machine learning and artificial intelligence, for applications to digital audio technologies.

January 2016 Ph. D Student, A-VOLUTE – INRIA, Villeneuve d'Ascq.

 Today Thesis subject: Real-time identification, localization and separation of audio sources in multichannel audio streams. Supervisor: Christophe Biernacki, Professor (Université de Lille, INRIA, CNRS)

November Part-time lecturer in Signal Processing, ECOLE CENTRALE DE LILLE, Vil-2017 – leneuve d'Ascq.

January 2018 Involved in lectures of Signal Processing at Ecole Centrale de Lille (Bachelor equivalent lectures)

September Part-time lecturer in Statistics, ISA, Lille.

2018 - Involved in lectures of Statistics with R at ISA (Bachelor equivalent lectures)

October 2018

April 2015 - Internship - R&D Engineer, A-VOLUTE, Villeneuve d'Ascq.

September Modelization of HRTF filters and optimization for 3D audio effect. Supervisor: Christophe 2015 Biernacki

May 2014 - Internship - Research assistant, Université Libre de Bruxelles, Bruxelle.

August 2014 Development of an experimental method for assessing the musical qualities of violin strings. Supervisor: Jean-Pierre Herman

Scientific communications

2017 Conference paper: ICASSP 2017.

Maxime Baelde, Christophe Biernacki, Raphaël Greff. A mixture model-based real-time audio sources classification method. 2017 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP), 5-9 Mar 2017, pp. 2427-2431, New Orleans, USA. [paper], [poster]

2017 Conference paper: JDS 2017.

Maxime Baelde, Christophe Biernacki, Raphaël Greff. Classification de signaux audio en temps-réel par un modèle de mélanges d'histogrammes. 49èmes Journées de Statistiques, June 2017, Avignon, France. [paper]

Education

2012–2015 **Engineering Degree**, *Ecole Centrale de Lille*, Villeneuve d'Ascq, *Decision making and Data analysis*.

2014–2015 Master Research in Applied Mathematics, *Université de Lille*, Villeneuve d'Ascq.

2010–2012 Preparatory classes: two-year undergraduate intensive course in mathematics and/or physics, Lycée Henri Wallon, Valenciennes.

2007–2010 **A-Level, engineering sciences and physics speciality**, *Lycée Pierre Forest*, Maubeuge.

Computer skills

 $\begin{array}{ll} \text{Software} & \mathrm{PYTHON}, \ \mathrm{R}, \ \mathrm{MATLAB}, \ \mathrm{C} \\ \text{programming} \end{array}$

Operating Windows, Linux system

Language

French Mother Tongue
English Technical and professional

Hobbies

- Music: play the piano (since 3 years) and the guitar (since 12 years)

- Videogames: RPG, Tactical

- Reading: thriller, science-fiction