

Career Objective

- + DATA ANALYSIS, MUSIC INFORMATION RETRIEVAL, MACHINE LEARNING
- + REAL TIME APPLICATIONS, SIGNAL PROCESSING
- + CUTTING EDGE MULTIMEDIA DEVELOPMENT PLATFORMS

Experience

- Oct. 2012 **Development and Research Engineer**, IRCAM - INSTITUTE FOR RESEARCH AND COORDINATION
Nov. 2013 IN ACOUSTICS/MUSIC, Paris.
Project voice for games: Optimization and improvement of the voice following method based on a short time Viterbi algorithm.
Project Sample Orchestrator II: Porting and real time development of a spectral envelope generator, a synthesis method based on a instrument model approach.
◦ *Tools and languages*: C, C++, Python, Matlab - mex, development of externals for Max/Msp - svn, git
- Sept. 2011 **Real time embedded Engineer**, ARKAMYS, Paris.
Sept. 2012 Development of a real time HMM based speech recognition application embedded on an ARM/DSP platform.
◦ *Tools and languages*: C, C++, Python, Texas Instrument ARM/DSP, Embedded unix, STM32 card based on ARM, HTK.
- Jan. 2011 **Final Internship**, VOXLER GAMES, Paris.
Aug. 2011 Developed a C++ sound application to be implemented in Aldebaran Robotics "Nao" robot, as part of the "YOJI" project. Development and implementation of a pitch calculating algorithm and speech compression for DSP, as part of the European "Wear a Ban" project.
◦ *Tools and languages*: C, C++, Python, Qt, Speex, HTK.

Education

- 2007–2011 **Masters of Engineering**, *Ecole Nationale Supérieure de l'Electronique et de ses Applications (ENSEA)*, Cergy, *Graduate School in Electrical Engineering, Computer Science and Telecommunications*.
Major : Signal Processing, Real-Time & Communications (with honors).
Three elective courses : Musical Acoustics, Speech Processing, Image Processing.

Computer skills

- Programming C/C++, QT, PYTHON, JAVA, Pure Data, Max/MSP, Matlab
Hardware Embedded linux, ARM architecture, Beaglebone Black, Arduino
Office MS Office, Open Office, LaTeX

Languages

- French **First language**
English **Fluent**
Italian **Basic**

Coding and Links

- Website www.magnizdat.org
GitHub <https://github.com/FabienCesari>
Linkedin <https://www.linkedin.com/in/fabiencesari>