

<p><b>Jean-Baptiste Berruchon</b></p> <p>135, rue du Moulin Rouge 85000 La Roche Sur Yon, FRANCE Tel : (33)6 11 75 62 83 jberruch@etu.u-bordeaux1.fr</p> <p>Born 11th, April 1980</p> <p>French nationality</p>	<p>Preparing a <b>Master Multimédia</b>, Faculté de Bordeaux I, <b>2005</b> Sound &amp; Image : Processing &amp; Analysis, equiv. to a Master's Degree,</p> <p><b>Maîtrise en Génie Informatique</b>, IUP La Rochelle, <b>2004</b> Computer Science diploma, equiv. to a Bachelor's Degree</p> <p><b>DUT Informatique Systèmes Industriels</b>, IUT La Rochelle, <b>2001</b> a two-year undergraduate Computer Science diploma</p> <p style="text-align: right;"><i>English : fluent    German : conversational</i></p>
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## Job Objective

Seek to work on a formative project in a creative atmosphere, where both my computer skills and my passion for music will be useful. I am greatly motivated to team up with high-skilled specialists in sound technology and to be part of a leading company.

### Computer Skills

<b>Langages</b>	80x86 assembler, C, C++, java, PL7.2, Grafcet, SQL, HTML, ASP
<b>Preferred Domains</b>	Microcontrollers, Signal Processing, Low-Level, Imaging, Real-Time
<b>Operating Systems</b>	Linux, Windows, MacOS 9, UNIX, VxWorks
<b>Signal Processing</b>	Matlab, Simulink, LabView, FFTW

## Training Content

The diploma I am currently preparing includes a Sound & Music Analysis & Synthesis course. I also have a traditional Signal Processing background from my previous degrees.

<b>Sound Analysis &amp; Synthesis</b>	spectral analysis psychoacoustics & compression musical parameters calculation (harmonicity, brilliance, volume,...) spatialization perception & emulation additive and FM synthesis effects (chorus, flanger, stretching, reverberation, ...) MIDI
<b>Signal Processing</b>	Fourier, Z and Laplace transforms digital filters design (Finite and Infinite Response) electronics (active & passive filters, op. amps, transistors...)

## Digital Sound Know-How

Besides this theoretical background, I acquired during either projects or practical works specific know-how that you might find relevant.

<b>Effects</b>	made a Robotization effect, using Overlap-Add technique
<b>Hardware</b>	controlled ADC/DAC board at low-level (PCLab 8055)
<b>Real-Time</b>	designed multithread applications with VxWorks, running on Motorola created real-time recursive filters, in C and in LabView
<b>Libraries</b>	FFTW, Jack, MidiShare, faudiostream
<b>Personal Practice</b>	CoolEdit Pro (Audition), Soundforge, Reason
Soon : February-March 2005	implementation of a binaural spatialization software, under the supervision of Sylvain Marchand, LABRI/scrime researcher

## Medical Imaging Developer, 5 month

<p><b>Nuclear Medicine Service</b> Hotel Dieu Hospital, Nantes 2004, 5 month placement</p>	<ul style="list-style-type: none"> <li>• <i>Mission :</i> to develop a toolkit allowing the quality control of gamma-rays cameras, in a practical, portable and norm-compliant implementation, java</li> <li>• <i>Tasks :</i> architecture design of the software implementation of normalized quality-rating algorithms (NEMA, IPEM) creation of GUI components and input/output classes</li> <li>• <i>Competence benefit :</i> ability to work in team</li> </ul>
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## Scientific Software Developer, 2 month

<b>Wind Energy Lab.</b> Technical Education Institute of Heraklio, Greece 2002, 2 month placement	<ul style="list-style-type: none"> <li>• <i>Mission</i> : to restructure and improve a wind turbine blade designer, C++</li> </ul>
	<ul style="list-style-type: none"> <li>• <i>Tasks</i> : cleaning and reshaping of the existing program 3D-mesh generation from the geometric parameters of the blade addition of an output to a mechanical strain calculation software (ANSYS)</li> </ul>
	<ul style="list-style-type: none"> <li>• <i>Competence benefit</i> : ability to solve algorithmic problems</li> </ul>

## Game Developer, 6 month, school project

<b>School Project</b> IUP GI La Rochelle 2002-2003 6 month as a project	<ul style="list-style-type: none"> <li>• <i>Mission</i> : to create a 3D "shoot'em up", C++ with OpenGL</li> </ul>
	<ul style="list-style-type: none"> <li>• <i>Tasks</i> : creation of the engine : classes, motion, collisions, events, scenario... writing of display functions</li> </ul>
	<ul style="list-style-type: none"> <li>• <i>Competence benefit</i> : understanding of multimedia software architecture</li> </ul>

## Moreover...

<b>Music</b>	Computer music : composition, audio recording, sound manipulation Studio engineering : attended a sound technique workshop (80 hours) Practice of various instruments : drums, guitar (classical & electric), now learning keyboard Played the drums in an "art rock" band, a traditional Breton music band, and currently playing the bass in a rock/metal band. Use of a Korg AX1000G processor.
<b>Reading</b>	Science-fiction, esotericism, music-related
<b>Cinema</b>	Odd movies (mulholland drive, the wall) and animated films
<b>Travel</b>	Greece, United Kingdom, Spain

References available upon request.