

Technology

Multimedia **Network**
DirectX - IP/TCP/HTTP,
HLSL, XNA EJB/Corba,
OpenGL - Multicast,
GLSL, Tibco RV, RPC,
GPGPU, VSTi RMI

IDE - Tools **OS**
Visual Studio, Windows (All),
IntelliJ, Windows
Eclipse
Photoshop Phone 7, Unix
3DSMax (Solaris, Linux)

DB **Version**
Oracle+olap, CVS, SVN,
Sybase, Clearcase,
Mysql Perforce

Education

Bachelor Business Administration - Social Worker – Specialist Teacher — IRTS Neuilly-sur-Marne - 2009

Information Technology & Computer Engineering – INSA Lyon – 1997

French high-school diploma – 1992

Languages

French - Mother tongue

English - Fluent

Spanish - Basic level

Personal

Demo-making

Computer Graphics

Music Composing

Game

Backpackers world tour

<http://diteoo.com/>

Mountain Trekking

Sportive Swimming

Guitar

3D-Engine-Tools Developer

Nine years of experience as a developer, team leader and software architect in an IT department, working for the investment banking and trading system branch of a French bank. Four years of experience as a Freelance in several Open Source projects, multimedia applications, software audio synthesizing, 3D computer generated application and demomaking projects, willing to participate to advanced games development.

Key Skills

3D Synthesis

- ♦ Raytracing rendering, Monte-Carlo methods, Stochastic PathTracing, Photon Mapping, RayMarching, Hardware Polygonal Rendering. Deferred Rendering, Post-Processing Effects - Tone Mapping, Bloom, Blur, dof.
- ♦ Real-time procedural synthesis (Textures –Delaunay, Voronoi, Perlin, Fractales, 3D mesh generated models)
- ♦ Real-time Audio Synthesis, Filters, Additive, Subtractive methods, FM-PWM,

Audio Synthesis

- Ring, Granular. Virtual instruments (specialized in FM8/Dx7 like).
- ♦ Modular synthesizer modeling

Tools

- ♦ Importer Asset (Collada-Dae, Obj, Fbx). Tools GUI (Winform, WPF, Swing)

Real-time

- ♦ Multithreading, Algorithm Optimizations, Assembler.

Language

- ♦ C/C++, C#.Net, Java. Script (Perl, Ruby, Python, Php), Web (Html, Xml, Xsd), Assembler x86-x64, 68000

References – Articles

Compression 2010

Article on a exe-data compression technique used in 4k intro <http://code4k.blogspot.com/2010/12/crinkler-secrets-4k-intro-executable.html>

Ergon Intro 4k 3^{ième} BreakPoint 2010

Complex visual and sound in 4096 bytes, 3D synthesis, ray-marching, optimizations. Making of ergon : <http://code4k.blogspot.com/2010/08/making-of-ergon-4k-pc-intro.html>

RayMarching 2009

Article on RayMarching, SphereTracing technique <http://code4k.blogspot.com/2009/10/potatro-and-raymarching-story-of.html>

Potatro Intro 4k 2009

Collaboration on a complex visual and sound in 4096 bytes, 3D synthesis, ray-marching, audio-synthesis and optimizations.

Olympia-SpaceDepths Amiga Demo 1989-90

Amiga demo in 68000 assembler <http://bit.ly/g3IkBn>
<http://bit.ly/dGuWyc>

Professional

Freelance 2009 – Today

- ♦ Computer teacher – Engineering department, University Marne-La-Vallée – OS Android, Java Project follow-up.
- ♦ *SharpDX*, an innovative and efficient C#.Net DirectX API <http://code.google.com/p/sharpx/>
- ♦ *NShader*, a syntax highlighting VisualStudio plugin for shading languages HLSL/GLSL/CG. <http://nshader.codeplex.com/>
- ♦ Open-Source projects: *NKnobman* <http://nknobman.codeplex.com/>, *NRenoiseTools* - <http://nrenoisetools.codeplex.com/>, *NetAsm* Windows port of a multi-Threaded, Real-time pricing server in C++.
- ♦ Team leader (7 developers) and Architect of a Java distributed multitier data service. 300+ users worldwide. Lead Architect on a large scale project (30+ developers). Java/EJB/C++ Profit and Loss and Risk Management Applications. 500+ users worldwide
- ♦ C++ Web System patrol for a broadband ISDN network project

Société Générale Trading Market Paris - New-York 1997 – 2006

IBM - La Gaude 1996 – 6 months