

**Tom Rochette**

1630, Sauve east street, app. #4  
Montreal, Quebec  
H2C 2A8  
(514)-466-2580

[tom.rochette@polymtl.ca](mailto:tom.rochette@polymtl.ca) - [tom@tomrochette.com](mailto:tom@tomrochette.com) - <http://www.tomrochette.com>

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Spoken and written languages: French (very good), English (very good)

**Main formation**

2008 - (2011) **B. Eng., Software engineering.** Ecole Polytechnique de Montreal, Montreal  
2007 - 2008 **B. Eng., Electrical engineering.** Ecole Polytechnique de Montreal, Montreal  
2005 - 2007 **DEC, Natural sciences.** Ahuntsic College, Montreal

**Professional experience**

**Eidos Montreal** / Montreal

May 2010 - August 2010

Intern programmer - Deus Ex 3 - Human Revolution

- Develop high quality softwares in C++;
- Optimize and debug code, from library level to game code;
- Develop and integrate a downloadable content (DLC) system;
- Develop tools to simplify the creation and testing of DLC in the company's environment;
- Actively participate in bug fixing reported by the QA team inside fixed delays;
- Experience with PS3/Xbox360 debugging.

**Ecole Polytechnique de Montreal** / Montreal

May 2009 - September 2009

Consulting engineer

- Re-write a university level course, specifically for software engineering;
- Develop a set of exercises and practical work that will be executed by the students;
- Develop a website in PHP;
- Elaborate an ontology about the software engineering domain.

Researcher

- Research in the domain of text-mining;
- Approach aiming to determine the content of a resource solely based on a pre-existing ontology, with the goal to assign one or many tags to that resource;

**Umbreon Network - Web hosting** / Montreal

2008 - 2011

Founder

- Develop a management interface for clients' accounts;
- Install, manage and maintain a Linux server. Update softwares;
- Write a set of scripts to automate the management of the server;
- Develop additional tools (console applications);
- Answer to technical support tickets.

Technical support

- Offer technical support for two free web hosting providers ([www.e3b.org](http://www.e3b.org), [www.umbreon.net](http://www.umbreon.net));
- Verify clients scripts for errors and offer fixes. Scripts are generally written in PHP.

## **Skills**

- C/C++/C#, .NET, Java, x86 assembly, Ruby, Visual Basic, Python, Perl, UML
- Qt, SDL, Open GL, DirectX, basic GLSL and HLSL
- Visual Studio, GCC, Borland Together, SVN, Design patterns
- Matlab, Maple, PSPice, LaTeX
- Web: HTML, PHP, CSS, Javascript, MySQL, Oracle, SQLite
- Windows 95 to 7, Linux Fedora/Debian, Mac Os 8/X
- Softimage|XSI, 3ds Max
- Microsoft Office Suite

## **Team projects**

**Billard game**, constructed from a simple framework.

- C++ programming, using OpenGL for rendering with basic GLSL shaders;
- User interface programmed in Java, use of the JNI API;
- Realistic physic engine (collision detection and handling);
- 3D modeling (3ds Max) and texturing;
- Possibility for the player to model a table and play it almost in real time.

**Networked billard game**, an extension of the previous billard game.

- C++/C# programming;
- Programming of a multi-threaded server responding to different types of queries;
- Programming of a user interface allowing players to chat;
- Programming of a PDA administration interface for Windows Mobile 5;
- Programming of the synchronisation based on a star topology network;
- Use of RakNet, Castle Project Active Record and SQLite libraries.

**Real time strategy (RTS) game**, constructed from an initial code base.

- C++ programming;
- Camera management, units creation, resources management;
- Artificial intelligence;
- Environment modeling;
- Use of DirectX (with HLSL shaders);
- Programming of game play and low-level libraries;
- Use of Awesomium, Lua, ticpp and FMOD libraries.

References can be obtained if required.

C.V. Tom Rochette

February 2011