# Lornac Mathieu

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### Work Experience

02/13 - **Orange** - **Ausy Consultant**, *Profile and Syndication department*, Sophia Antipolis. Technical Environment:PHP, C++, Ruby, CVS, Git, Chef

Technical Environment: C++, Qt, Boost, SVN/Git

02/12 - 07/12 **DoremiLabs**, Sophia Antipolis, Improvement of a live streaming solution for cinema shows, satellite

stream reception support.

Technical Environment: C/C++ CVS, Debian3, x86

09/11 - 02/12 MargOconseil, Development of a code generation and language interoperability framework, Paris, Tech-

nical design, realisation.

Technical Environment: Ruby, C++, Mercurial

08/10 - 08/11 Ensuite Informatique, Development of situational analysis processors, Paris, Technical design, realisa-

tion

Technical Environment: C++, QtCore, Flex/Bison, CMake, Git

#### Free software contributions

YACassandraPDO PHP Data Object driver for the cassandra database system, Support of CQL3 features, bugfixes,

performance and stability improvements.

https://github.com/Orange-OpenSource/YACassandraPDO

Okular **KDE's Universal Document Viewer**, *Bug fixing*, small implementations.

KDev-Valgrind Integration of the Valgrind tools in KDevelop, Project Maintainer.

https://projects.kde.org/projects/playground/devtools/plugins/kdev-valgrind

#### Education

2012 **Epitech**, Master of Science in Information Technology, Paris, France.

Major: Computer Programming

Summer 2008 Alliant International University, San Diego CA, USA.

English Class with EF Education

2004 - 2006 Two Year Technical Degree, Lycee Suzanne Valadon, Limoges, Diploma BTS.

Major: Information Technology

2003–2004 MIAS (Mathématics and IT applied to sciences), Science faculty of Limoges.

#### Computer Skills

Imperative C, Ada

Object Oriented C++, Ruby, PHP, Python

Knowledge LATEX, bash, CMake, Java, RoR, Flex/Bison

#### Languages

French Mother tongue

English Good level both written and oral

## Interests and Activities

Project Euler

I participate to this challenge which allies algorithmic and mathematics  $\verb|http://projecteuler.net|$ 

Sports Mountain biking, Ultimate frisbee, Basketball

#### Work Experience Details

#### 02/13 - , Orange **Profile and Syndication**.

• Development of a request duplication Apache module.

Duplication of requests that matches defined criterias. The target is here to feed both the former and the new database systems in order to ensure no regression has been introduced by the lastest release.

Filtering on HTTP requests, based on RegExp. Body and/or header analysis

Request modification before duplication

Performance sensitivity (more than 1000 requests/s)

• Evolution of a PHP Data Object driver for the cassandra database system

BugFixing on types convertion

Support of complex types (collections)

Persistent connections support

#### 08/12 - 01/13,

#### Cartographie, Conception Implémentation.

#### SpotImage

The Pixel Factory is a complete suite that produces geoagraphical images.

 Maintenance and implementation of new features on graphical editors that gives the opportunity to fix algorithms glitches

Abstraction of the filter's base geometry

Adaptation to a large and complex source code

Realisation of a new filter type

#### DoremiLabs

#### **Digital Cinema solutions**, *Improvement of the live streaming platform*.

- •Integration of a DVBS-receiver card (Satellite)
- •Transport Stream content analyse (Program list, languages, subtitles...)
- •Transformation of the streaming platform from a single stream capacity to a multi client multi-stream system

#### MargOconseil

#### **Financial consulting, R&D team**, *Conception Implementation*.

Development of a re-engineering and code generation framework.

- "'CodeCase"' is an innovative solution that facilitates the
- Model driven development
- •C++ code generation from the description of a model in Ruby
- •Compile time object converter between Ruby and C++ (Introspection techniques developped by Alexandrescu)

#### MargOconseil

#### Financial consulting, R&D team, Conception Implementation.

Development of a re-engineering and code generation framework called CodeCase

- •Model driven, Test driven, Aspect oriented development using Agile methodology
- •Compile time object converter between Ruby and C++ (Introspection techniques developped by Alexandrescu)
- •C++ Ruby AspectJ language interoperability

#### Ensuite-Info

#### Company specialized in situational analysis, Conception Implementation.

- Development of the processor core, realization of 2 languages parsers using flex/bison, network communications, XML parsers, database abstraction, task scheduler
- Unary tests