# Lornac Mathieu

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## Object Oriented Software developper

	Work Experience
02/13 - current	<b>Orange</b> , (Consultant) Profile and Syndication department, Sophia Antipolis. Technical Environment: PHP, C++, Ruby, CVS, Git, Chef
08/12 - 01/13	<b>Spot Image</b> , (Consultant) Improvement of geo-production editors, Sophia Antipolis. Technical Environment: C++, Qt, Boost, SVN/Git
02/12 - 07/12	<b>DoremiLabs</b> , <i>Digital Cinema solutions</i> , 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	<b>MargOconseil</b> , Development of a code generation and language interoperability framework, Paris, Technical design, realization.  Technical Environment: Ruby, C++, Mercurial
08/10 - 08/11	<b>Ensuite Informatique</b> , <i>Development of situational analysis processors</i> , Paris, Technical design, realization.  Technical Environment: C++, QtCore, Flex/Bison, CMake, Git
	Education
2009 - 2012	<b>Epitech</b> , <i>Master of Science in Information Technology</i> , Paris, France.  Major: Computer Programming
Summer 2008	Alliant International University, San Diego CA, USA. English Class with EF Education
2007 - 2009	Engineer School of Geneva, Geneva, Switzerland.  Major: Information Technology
2004 - 2006	<b>Two Year Technical Degree</b> , <i>Lycee Suzanne Valadon</i> , Limoges, Diploma BTS. Major: Information Technology
	Computer Skills
Imperative	C, Ada
Object Oriented	C++, Ruby, PHP
Knowledge	LATEX, bash, CMake, Java, RoR, Flex/Bison,

# Languages

French Mother tongue

Python

English Fluent both written and oral

## Interests and Activities

Project Euler I participate to this challenge which allies algorithmic and mathematics http://projecteuler.net Sports Mountain biking, Ultimate frisbee, Basketball

# Work Experience Details

#### Orange Profile and Syndication.

• Development of a request duplication Apache module.

Requests that matches defined criteria are duplicated to a target machine. Using this module, one can maintain consistency between the former and the new system.

This module helps us to guarantee that no regression has been introduced by the latest release.

Filtering on HTTP requests, criteria are based on RegExp that can analysis the request body and/or header Request modification before duplication (RegExp based)

Performance criticality (more than 1000 requests/s)

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

Support of complex types (collections)

Persistent connections

#### SpotImage Geographical images production.

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

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

Adaptation to a large and complex source code

Realization of a new image filter

### DoremiLabs Digital Cinema solutions, Improvement of a live streaming platform.

- •Integration of a Digital Video Broadcast Satellite receiver card
- •Stream content analysis (Program list, languages, subtitles...)
- •Transformation of Doremi's streaming platform from a single stream capacity to a multi-clients multi-streams system

#### MargOconseil Financial consulting, R&D team.

Development of a re-engineering and code generation framework

- •Model driven framework, Test driven and Aspect oriented development using Agile methodology
- •C++ code generation from the description of a model in Ruby
- $\bullet \mbox{Compile}$  time object converter between Ruby and C++

### Ensuite-Info **Situational analysis**, 3 days a week.

- Development of the processor core, realization of 2 languages parsers (flex/bison), network communications, XML parsers, database abstraction, task scheduler
- multi-threading context,
- Unary tests

## Free software contributions

## YACassandraPDO PHP Da

PHP Data Object driver for the Cassandra database system, Compliance to CQL3, Bugfixes, performance and stability improvements.

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

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

http://okular.kde.org/

## ${\sf KDev\text{-}Valgrind}$

#### Integration of the Valgrind tools in KDevelop, Project Maintainer.

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