

Lornac Mathieu

Software developer, Object Oriented

Work Experience

- 02/13 - current **Orange**, (*Consultant*) *Profile and Syndication department*, Sophia Antipolis.
Technical Environment: PHP, C++, Ruby, CVS, Git, Chef
- 08/12 - 01/13 **Spot Image**, (*Consultant*) *Improvement of geo-production editors*, Sophia Antipolis.
Technical Environment: C++, Qt, Boost, SVN/Git
- 02/12 - 07/12 **DoremiLabs**, *Digital Cinema solutions*, 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, Technical design, realization.
Technical Environment: Ruby, C++, Mercurial
- 08/10 - 08/11 **Ensuite Informatique**, *Development of situational analysis processors*, Paris, Technical design, realization.
Technical Environment: C++, QtCore, Flex/Bison, CMake, Git

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
- 2007 - 2009 **Engineer School of Geneva**, *Geneva, Switzerland*.
Major: Information Technology
- 2004 - 2006 **Two Year Technical Degree**, *Lycee Suzanne Valadon*, Limoges, Diploma BTS.
Major: Information Technology
- 2003-2004 **MIAS (Mathematics and IT applied to sciences)**, Science faculty of Limoges.

Computer Skills

- Imperative C, Ada
- Object Oriented C++, Ruby, PHP
- Knowledge \LaTeX , bash, CMake, Java, RoR, Flex/Bison, Python

Languages

- French **Mother tongue**
- 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
- 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 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/>

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

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