

# Jérémy Zurcher

## Senior Software Engineer

### PERSONAL PROFILE

Programming is my passion and has been since 2000. Being a dedicated, creative and confident developer, I am continuously challenging myself. I possess extensive knowledge and interest in many distinctive domains from low level algorithms and structure optimisation to high level frameworks. Ability to increase reliability, maximise productivity, and introduce system efficiencies. Being a responsible and career-minded worker, I am accomplished in independent as well as collaborative project management.

Currently seeking employment where I can challenge my programming skills and expand my insight.

### PREVIOUS EMPLOYMENT TO PRESENT

Present **Software developer / IT manager** - Heraeus MCD-HMSA - Medical Company

2007-05 **The company** : Heraeus, the technology group headquartered in Hanau, Germany, is an international company focused on environment, energy, health, mobility and industrial applications. With approximately 12'500 employees worldwide in more than 100 subsidiaries in 38 countries, Heraeus holds a leading position in its global markets. The Swiss facility in Yverdon employs 100 people and is focused on medical components manufacturing.

**Position** : we've been a 2 person team, but since March 2015, I am the only IT people. Beside the projects I have to lead forward, I manage the IT infrastructure.

#### Infrastructure management :

- linux and windows 2008 servers.
- Oracle and PostgreSQL databases.
- professional ERP.
- in house technology based intranet.
- nginx, tomcat, postfix services.

#### Developments :

- 2 quality oriented web applications managing per article specifications and constraints. one to validate the conformity of the parts entering the facility, the other to ensure the conformity of the parts leaving the facility and generate certificates of conformity shipped to our customers.  
technologies : java, vaadin, tomcat, mybatis, SQL, PostgreSQL
- shipping tracking application, used by other facilities in the USA.  
technologies : java
- time tracking web application, used by other facilities in the USA.  
technologies : java, vaadin tomcat, mybatis, SQL, PostgreSQL
- production data tracking and analysis touchscreen application.  
technologies : C, efl, SQLite
- key performance indicators reporting web platform linked to the ERP database.  
technologies : SQL, ruby, FusionCharts, JQueryes
- numerous automated mailing list reports  
technologies : SQL, ruby
- various production process oriented desktop applications.  
technologies : python, wxPython, ruby, tcl / tk

### AREAS OF EXPERTISE

- C/C++, java, ruby, python
- shell scripting (bash, sed, gawk)
- [c]make, ant, maven, gradle, gem
- junit, rspec, ctest, check
- rcov, cobertura, coverity, jenkins
- efl, gtk, qt
- Oracle, PostgreSQL, mybatis, hibernate
- nginx, lighttpd, tomcat
- vaadin, Node.js, AngularJS
- git, gitolite, cgkit, svn
- linux system administration, debian, archlinux

### CONTACT DETAILS

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<https://github.com/jeremyz>

↑ **Software developer / Automation** - Zedem Sàrl - Engineering office  
2005-01 The company : Zedem is an inovative engineering office, that within it's more than 20 years of existence has been mandated by big companies like *Swatch Group, Rolex, Alinghi, Solar Impulse*.

Position : Software developer, IT manager, Automation

Significant mandates :

- NSA Technologies - Race boat sails manufacture  
Desktop application to visually supervise the manufacturing of racing boat sail.  
technologies : python, wxPython
- Décision SA - Race boat manufacture  
Interfacing a defence race game with a 1:1 scale boat simulator for *Alinghi*.  
technologies : C++, OpenGL

↑ **Independant Software Engineer**  
2003-01 Fiduciary reporting software development  
technologies : java, iText

## ACADEMIC QUALIFICATIONS

- 2016 **Data Structures - Coursera** - UC San Diego
- 2016 **Algorithms on Graphs - Coursera** - UC San Diego
- 2016 **Algorithms on Strings - Coursera** - UC San Diego
- 2016 **Algorithmic Toolbox - Coursera** - UC San Diego
- 2014 **Programming Mobile Applications for Android - Coursera** - University of Maryland
- 2014 **Algorithms, Part I and II - Coursera** - Princeton University
- 2013 **Functionnal Programming Principles in Scala grade - Coursera** - EPFL
- 2004 **HES Software Engineer formation** - EIVD - Yverdon
- 1999 **Foundation Course** - APA CEPNV - Yverdon
- 1998 **Maturité S** (Science stream) - CESS Morges

## PROFESSIONAL ACHIEVEMENTS

- Parts quality control management and reporting web application (java/Vaadin/PostgreSQL).
- Interfacing an OpenGL defence race game with a 1:1 scale boat simulator for *Alinghi* (C/C++).
- Client/server application tracking an automated sail manufacturing process (wxPython)..
- ERP data based key performance indicators reporting web application (ruby/Oracle).
- Production tracking touchscreen application and data analysis (C/EFL/SQLite).

## OPEN SOURCE PROJECT CONTRIBUTIONS & PERSONAL PROJECTS

- **Enlightenment** Desktop: core developer since 2012, object system rewrite, and many more (C).
- **Hydrogen** Drum Machine: migration from scon to cmake, internal structures rewrite (C++).
- **Rubinius**: FFI capabilities enhancement (C++/ruby).
- **RustAndDust**: android/desktop strategy board game (java/libgdx).
- **ffi-efl**: an FFI binding to the Enlightenment Foundation Libraries (ruby).
- **zorglub**: a nano web application framework currently used in production (ruby).
- **eddoors-ruby**: a ruby rewrite of evenja C++ application framework concepts (ruby).
- **lock free**: compare-and-swap based lock free structures playground (C).

## PROFESSIONAL ABILITIES

- Quick access with handling major existing code base.
- Capable of designing solutions from scratch.
- Keen to carry out extensive tests.
- Used to working with strict protocols.
- High complexity problem comprehension.
- English oral and written.

## PERSONAL SKILLS

- Eager to learn
- Perfectionist
- Communication skills
- Enthusiast
- Attention to details
- Levelheaded and pleasant character