Xavier Maso
software engineer, applied mathematics student

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Skills

Software development

Languages

Ruby	Javascript	Bash	Python	Elm-Lang	Latex
★★★★☆	★★★★☆	★★★★☆	★★★☆☆	★★★★☆	★★★★☆

Rust	Haskell	C#	Java	C	ASM x86	PHP
★★★★★	★★★★☆	★★★★☆	★★★☆☆	★★★★☆	★★★★★	★★★★★

Libraries / frameworks

Ruby-On-Rails │ ExpressJS │ Angular │ SailsJS │ Pygame │ XNA │ Zend │ jQuery │ CodeIgniter

Systems administration

· Linux: Ubuntu, Debian, Raspbian, Arch, NixOS.
· Continuous integration: Ansible, Docker, Jenkins, Travis, Capistrano.
· Web technologies: Nginx, Unicorn, Apache2, Express (Node.js).
· Databases: MySQL, PostgreSQL, Redis and MongoDB.

Soft skills

· Team management: implement the environment which allows to develop the products and achieve goals.
· Used to Agile methodology, especially Scrum, and Lean approach. Pair programming and TDD practice.
· Speaker: animation and presentation about a product, a project or to share experiences.
· Interpersonal: listening and understanding individuals to facilitate interactions within a group.
· Marketing: around and through a product and / or company to communicate values.

Professional experience

Orange Application for Business   *June 2017 – August 2017*
System administrator, Securing Workstations   *Bordeaux, France*

OAB is a subsidiary of Orange S.A developing and hosting services for businesses.
Integrated to an operations team of four, my mission was to secure their Linux workstations.
· System administration: Arch, Ubuntu, Debian.
· Define and apply good security practices for laptops and mobile devices.
· Development: ansible roles, audit-ssh-client-config script.
· Research: securing the boot process (anti-evil maid), Nixos, Public Key Infrastructures.
· Training and communication about the security practices: write documentation, create tutorials, run workshops.

RedShield Security Ltd   *January 2015 – April 2016*
Software Developer   *Wellington, New Zealand*

Shielding-with-a-service company providing a web application firewall, vulnerability scanner and analyzer to assist IT departments ensure the security of their systems.
· Development in Ruby and Javascript.

- Configuration of production and CI servers (Jenkins).
- Debugging, automated testing.
- Research and development.
- Security: offensive, secure development, incident response.

CER SNCF June 2012 – Oct 2014
IT service *Bordeaux, France*

Distributed all over the Aquitaine and Poitou Charentes French regions, the CER (for Committee of Regionnal Establishment) provides services to SNCF's workers.

First missions
- Web development in PHP with the Zend framework.
- Production environment management: Nginx front-end with FCGI, PostgreSQL production database.
- Team work with Git and automated deployment on top of this VCS tool.
- Adaptation of our tool for another CER: needs analysis, objectives definition, integration to our development and deployment processes and tooling.

Project, subject of my master thesis
- Build a website dedicated to SNCF's employees: tasks and planning definition, resources and skills affectation to provide this new service within six month with a three person team.
- The application can be found at cheminot.cer-sncf-bx.org .
- Communication and product launching: define and reach targets, follow the adoption and usage of the product.
- Integration within the existing information system: shared databases services, web server deployment.
- Quality management by software testing using Rspec and Capybara.
- Git and Capistrano for code management and automated deployment.
- Back-end written in Ruby-On-Rails. Front-end used Slim, SASS and CoffeeScript.
- Server on Ubuntu 14.04, database is PostgreSQL, Nginx and Unicorn as web stack.

Others
- Information system maintenance: Zimbra mail, Windows2008 domain, Debian web servers and support.
- IT service management: needs analysis, tasks definition, listing of skills and resources to prioritize our work.
- Help in recruitment for IT service: define required skills, job scope ; participate during interviews.

Cabinet P.PI/4 Summer 2011
Web developer summer internship *Bordeaux, France*
- Web development in PHP with the CodeIgniter framework.
- Seven students team organized with the Scrum method.
- Interviews with client for needs analysis.

Education

University of Bordeaux 2016 – today
College of Sciences and Technologies *Bordeaux, France*
- Master Mathematics and Applications: Cryptology and IT Security.
- Refresher training in Mathematics.

Ingésup (www.ingesup.com) 2009 – 2014
Information System Expert *Bordeaux, France*

Five year of university studies in computer information technologies (specialty in Development).
- Member of the security lab: research and learning about exploitation and penetration testing.
- Member of the games lab: participation in video game development contests.

MOOC, France université numérique   *2014*

From manager to leader (website)

Lycée La Boétie, Academy of Bordeaux   *2005 – 2009*

French Baccalauréat in Sciences (specialty in Mathematics), with honors.

Projects

Personal dedicated server   *2014 – Today*
server administration

Co-owner of a dedicated server, used to manage personal services such as Gogits, Owncloud, Selfoss, Etherpad, Wallabag and websites.
· Running on Debian systems, using Ansible for automation and Docker containers for modularity and isolation.

xaviermaso.com   *2015 – Today*
web development

My personal website.
· Front-end written in Elm, back-end powered by ExpressJS.
· Sources on Github: github.com/Pamplemousse/xaviermaso.com .

MeuhOnAir   *December 2017*
development

Live stream of RadioMeuh's playlist, on Twitter.
· Web scrapping, Twitter api, written in Python, running on Heroku.
· Sources on Github: github.com/Pamplemousse/MeuhOnAir .

Owasp Top 10   *December 2017*
web development, security

Challenge from Nuit De L'Info to develop an app vulnerable to the 2017 OWASP Top 10.
· Team of 3 students, working a couple of hours.
· Vulnerable web pages implemented using Flask (a Python web microframework).
· Sources on Github: github.com/Pamplemousse/owasp-top-10-demo .

Alfred   *2015 – Today*
development

My very own "personal assistant", accessible by texting. Abandonned.
· Web scrapping, Twilio api, written in Ruby, running on Heroku.
· Sources on Github: github.com/Pamplemousse/alfred .

There is more: abandonned projects, dirty hacks that I am not proud of anymore... Have a look on my website: xaviermaso.com#projects .

Hobbies

Reading	**Challenges**	**Sports**
sciences	security and development:	muay thai, diving (PADI Advanced OpenWater)
sociological and political essays	root-me, w3challs, codeschool	former judoka, football and handball player