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

Mozilla Corporation   *May 2018 – today*
Web security intern, Scanning modern web applications with OWASP ZAP   *London, United Kingdom*

The Firefox Operations Security team protects the core services and release engineering infrastructures Mozilla relies on to build, ship and run Firefox.

OWASP ZAP is a free and open-sourced security tools to help automatically find security vulnerabilities in web applications.

· Research on modern web applications (Single Page Applications) vulnerabilities.
· Research and development in Javascript: record and replay user interactions within any targeted web application.
· Attached to a remote team and contributing to an open-source community.

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 engineer *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*
Full-stack developer *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 intern *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.

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 .

There are 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	muay thai, diving (PADI Advanced OpenWater)
sociological and political essays	root-me, w3challs	former judoka, football and handball player