



# Benjamin RAYMOND

Software engineering  
in Geneva - from January 2020

23 years old

french nationality

+33 6 37 78 49 68

b.raymond@protonmail.ch

benjamin-raymond.pro

linkedin.com/in/b-raymond

353 chemin des etangs  
01220 DIVONNE-LES-BAINS

## Technical skills

### Software Development

**JavaScript** + Node/Express + React  
**TypeScript** + Angular

**PHP 7** + Laravel + Symfony  
**Database** + MySQL + MongoDB

**Java** + JEE, EJB + RMI, ESB  
**Android** + Ionic + JNI

**Software engineering**  
+ Git, SVN + Trello  
+ Continuous integration  
+ Agile project management

### Data Science

**Data analysis**  
+ Web scraping + Pandas  
+ Amazon AWS  
+ Zeppelin, Jupyter (Spark)  
+ Machine learning

**Data visualization**  
+ Plotting: D3.js, Plot.ly  
+ Animating: Flash, Pixi, Phaser  
+ Editing: Photoshop, Illustrator

## Langages



## Other

- Driver's license
- BAFA
- Paragliding initial certification

## Experience

### Data Science Intern

Intern Logitech, Lausanne Feb. - Aug. 2019

Using Big Data to gather business insights, in CTO Office:

- Design an optimized & reliable data analysis pipeline for client behavior analysis
- Domains: Data science, data engineering, data visualization, soft. engineering
- Technologies: **Amazon AWS, Zeppelin, Spark**

Reference: Nicolas Schiper (supervisor)

### IT Consultant

Developer Junior Enterprise of EPFL Oct. - Feb. 2019

Security & scalability audit for a b2c platform.

- Meeting w/ the client, advising, code audit for scalability and security
- Domains: Web security, web scalability, soft. engineering

### Software Engineer Intern

Intern CERN, Geneva June - Sept. 2018

Internship at CERN - European Organization for Nuclear Research

- Implementing a remote terminal for accessing the LHC magnets power converters
- Implementing signal processing features for the PowerSpy application
- Technologies: **Python with asyncio, Javascript**

Reference: Joni HERTTUAINEN (supervisor)

### Co-funder - App for mathematics teachers

Co-funder domatex.fr 2015 - now

Co-founder in partnership with a mathematics teacher.

- Dvp. of the app, ux, latex compilation servers, sysadmin
- Setting up partnerships, customer relationship (5,000 users currently)
- Technologies: **PHP7, SQL, Node, TypeScript, Stripe, AngularJS, LaTeX**

Reference: Stéphane MONTÉGU (co-funder)

### Software Developer & IT Consultant

Freelance HappyFrog 2013 - 2016

Discovery of the corporate world, customer portfolio development  
Adaptability to different sizes of companies (SME, TPE)

#### NovaPharm laboratories inventory management system

- Custom development of the intranet (php / mysql):
- Immersion in the company

#### Intervention on CMS

- oscarlett.com: Custom developments, automation scripts
- booking.escattes-aventure.com: Php / mysql booking module online
- lesgourmands.com: Complete joomla module for online booking

### Camp counsellor

Employee Eveil en mouvement Summer 2015

Employee Escattes Aventure Summer 2014

- Reception of participants in French and English
- Group & activity animation, equipment safety check (for Escattes Aventure)

## Education

### EPFL - Ecole Polytechnique Fédérale de Lausanne

 Student

 Lausanne, Switzerland

 EPFL

 Sept. 2018 - February 2019

Erasmus exchange at EPFL

Main courses: **Machine learning, Applied data analysis, Data visualization, Computer Security**

### Master in Computer Science and Applied Mathematics at ENSEEIHT

 Student

 Toulouse, France

 Enseeiht - INP Toulouse

 2016 - 2019

Courses (in French and English):

- Applied Mathematics (numerical optimization, big data, notions in computer vision)
- Computing (operating system, parallel programming, networks, security)
- Introduction to management (accounting, law, simulation and business management)

Group projects, oral defenses.

### Preparatory class for the grandes écoles

 Student

 Montpellier, France

 High school Jean Mermoz

 2014 - 2016

Intensive training in mathematics, physical sciences and engineering sciences, preparing for the entrance exams to the French engineering schools.

### Scientific high school diploma

 Student

 Castelnau-Le-Lez, Fr.

 High school G. Pompidou

 2014

With honours, option computer science

## Personal projects

### Web Application - Humorous image bank

 Funder

 [tiny.cc/5y11az](https://tiny.cc/5y11az)

 2016 - 2018

The site lists humorous stickers to enrich conversations, such as emojis.

Project led from end to end.

- Functional specification of the application
- Site security (csrf, xss), anti protection against ddos (nginx + fail2ban limitations)
- Optimization of database access (Memcached, filesystem cache)
- API and chrome plugin development to integrate stickers on various websites
- (In progress) Redesign of the current site under NodeJS / Express for the back-end, Angular for the front-end

Site statistics: **6,000 visits per day, 12,000 registered members, more than 150,000 published images.**

Technologies: **Laravel, PHP7, MySQL, Memcached, Ionic, Angular, Add-on Chrome / Firefox / Opera**

### Hadoop - Distributed execution of Map-Reduce applications

 Agile Project Manager

 [tiny.cc/mz11az](https://tiny.cc/mz11az)

 ENSEEIHT

 2017

Project carried out in the school setting, over several months.

- Establishment of a platform allowing distributed and parallel execution of Map-Reduce type applications
- Platform test: Calculation of PI with the Monte-Carlo method
- Creation of deployment scripts, documentation of the code in javadoc format
- Management of a team of 5 developers, application of agile methods

Technologies: **Java, Socket, Semaphores, RMI, bash**

### PixiFight - Browser Realtime Multiplayer Game

 Developer

 [tiny.cc/rx11az](https://tiny.cc/rx11az)

 2015

Browser game, where you control a player in a 2D universe, and where you can move in a randomly generated map of more than 10,000,000 blocks.

- Management of the display of other players (client-side prediction)
- Memory and bandwidth optimization data storage, client / server communications

Showcase project, the demo is still running but there is no publicly published version of the game

Technologies: **TypeScript, Node, WebSocket, Javascript, CreateJS**