

# Alexandre GALOPIN

Scientific software developer  
Ph.D. in medical informatics

35 avenue du Général de Gaulle  
91170 Viry-Châtillon, FRANCE  
alexandre.galopin@orange.fr  
+33 6 80 90 00 64  
<https://linkedin.com/in/alexandregalopin>

## Professional experience

**R&D engineer - Ph.D. candidate**, VIDAL, Sep. 2012 - Oct. 2015

- Thesis topic : Ontological modeling of clinical practice guidelines to provide flexible decision support  
Development of a clinical decision support system for the management of patients with hypertension and type 2 diabetes.  
*Technical aspects* : PHP, MySQL, JAVA, REST API, OWL, SWRL, Python, Javascript, JQuery, XML/XSD, HTML5, CSS3, LaTeX, Git
- Formalization of clinical practice guidelines and development of a JS widget producing an interactive and browsable decision tree to allow patient data structuration using medical terminologies (ICD-10, DRC, CISP2).  
*Technical aspects* : Javascript, JQuery, PHP, XML, HTML5, CSS3, Git, Test driven development, Continuous delivery

**Independent iOS developer**, Sep. 2011 - Sep. 2012

- Development of Génériques TV, an Appstore featured iOS game that was downloaded 100,000 times. Integration of Game Center, Facebook and Twitter sharing.  
<https://itunes.apple.com/app/generiques-tv/id467576578>
- Development of CeleBody, an iOS application that calculates the body similarity between the user and the most famous women.  
<https://itunes.apple.com/app/celebody/id919961248>  
*Technical aspects* : Objective-C, SQLite, CocoaPods, Social framework

**Scientific developer intern**, Sanofi, Mar. 2011 - Sep. 2011

Development of modules for XDB2 (X-Ray Cristallography Database), an internal web-based platform used by 200 scientists of the Structural Biology department to enter data about every step of the crystallization process.  
*Technical aspects* : ASP.NET/C#, PL/SQL, Oracle DB

## Education

|      |                                        |                                                          |                                    |
|------|----------------------------------------|----------------------------------------------------------|------------------------------------|
| 2015 | <b>Ph.D.</b><br><i>summa cum laude</i> | Université Pierre et Marie Curie (UPMC)<br>Paris, France | Medical<br>informatics             |
| 2011 | <b>M.Sc.</b><br><i>cum laude</i>       | Université Paris Sud<br>Orsay, France                    | Bioinformatic and<br>biostatistics |
| 2009 | <b>B.Sc.</b><br><i>cum laude</i>       | Université d'Evry Val d'Essonne<br>Evry, France          | Computer sciences                  |

## Skills

|             |                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Informatics | <u>General</u> : JAVA, Python, C#, Perl, C<br><u>Web development</u> : PHP5, Javascript, JQuery, HTML5, CSS3, XML/XSD<br><u>iOS development</u> : Objective-C, Cocoa, CocoaPods, WatchKit, XCode<br><u>Semantic Web</u> : OWL, SWRL, RDF, JENA API, Protégé<br><u>Databases</u> : MySQL, SQLite, Oracle, PL/SQL<br><u>Scientific</u> : R, Scilab<br><u>Other skills</u> : Git, LaTeX, Tomcat, Maven, Test-Driven Development, Continuous delivery |
| Topics      | Medical informatics, Artificial intelligence, Decision support, Semantic web, Ontology, Full-stack web development, iOS development, Project management, Scientific writing, Research                                                                                                                                                                                                                                                             |

## Scientific publications

### **An Ontology-Based Clinical Decision Support System for the Management of Patients with Multiple Chronic Disorders.**

Alexandre Galopin, Jacques Bouaud, Suzanne Pereira, Brigitte Séroussi

*Stud Health Technol Inform.* 2015;216:275-9.

### **Clinical practice guidelines consistency for patients with multimorbidity: a case-study in the management of type 2 diabetes and hypertension.**

Alexandre Galopin, Jacques Bouaud, Suzanne Pereira, Brigitte Séroussi

*Stud Health Technol Inform.* 2015;210:344-8.

### **Using an ontological modeling to evaluate the consistency of clinical practice guidelines: application to the comparison of three guidelines on the management of adult hypertension.**

Alexandre Galopin, Jacques Bouaud, Suzanne Pereira, Brigitte Séroussi

*Stud Health Technol Inform.* 2014;205:38-42.

### **Comparison of clinical practice guidelines from a knowledge modelling perspective: a case study with the management of hypertension.**

Alexandre Galopin, Jacques Bouaud, Suzanne Pereira, Brigitte Séroussi

*Stud Health Technol Inform.* 2014;197:21-5.

## Personal projects

### **Food Alerts, 2015**

Creation of a prototype Android application for a quick analysis of food and drug composition and allergen detection.

Food Alerts won the "HEALTH SOLUTION MOST LIKELY TO SUCCEED" award at the Hacking Health Camp 2015.

Technical aspects : Android SDK, Photoshop

### **MILW - Movie collection manager, 2012**

MILW is a multi-user website created to facilitate the management of large movie collections. The goal was to offer a great responsive interface but also methods to make the best use of a collection. The website is developed in PHP/MySQL and relies on the Allociné API to get all the information about movies.

Technical aspects : PHP5, MySQL, JQuery, HTML5, CSS3

### **MangaDownloader, 2012**

MangaDownloader is a website developed to allow users to download and manage their manga and comics collections. It relies on manga reading websites such as Mangafox or MangaReader. We then offer features to improve reading experience such as one-click download, automatic updates or export to CBZ.

Technical aspects : PHP5, MySQL, JQuery, HTML5, CSS3

## Other information

|                  |                                                                                                                                       |
|------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| Languages        | <ul style="list-style-type: none"><li>- French (mother tongue)</li><li>- English (full professional proficiency, BULATS C1)</li></ul> |
| Driving license  | Category B + vehicle                                                                                                                  |
| Culture & sports | Tennis (competitive level), Cyclism (competitive level), Handball, Surf<br>Digital photography, History of France                     |
| Other            | Ph.D. student delegate at the LIMICS (UMR-S 1142) laboratory council (2013-2015)<br>Supervision of a M.Sc. trainee (2015)             |