

## SAMUEL GIFFARD

22 ave. Guy de Maupassant  
06160 Juan les Pins, France  
samuel@giffard.co  
+33 (0) 6-01-79-56-20

### EDUCATION

- 2011 - 2012 MSc Computer Science University of Edinburgh – Scotland  
+ **MSc Computer Science with Distinction** in Computer Systems, Software Engineering and High Performance Computing
- 2009 - 2011 BSc (Hons) Computer Science Robert Gordon University – Scotland  
+ **First-class Bachelor with Honours** in Computing for Internet and Multimedia
- 2008 - 2009 Licence 3 Informatique Fondamentale Toulouse III (Université Paul Sabatier) – France  
+ Equivalent: third year of BSc, Fundamentals in Computer Science
- 2007 - 2008 **DUT Informatique** IUT “A” – Toulouse III – France  
+ Equivalent: HND Computing  
+ Two-year University degree in Computer Science, in one intensive year (called “Année Spéciale”)
- 2006 - 2007 CPGE TSI Lycée Jean-Baptiste Dumas – Alès – France  
+ Preparation for national competitive entrance exams to leading French “Grandes Écoles”, specializing in Mathematics and Physics
- 2006 Baccalauréat, in Electronics Lycée Antoine Bourdelle – Montauban – France  
+ Equivalent: A-Levels  
+ **Bac STI Génie Électronique mention Bien** (top 10%, ~ with Honours)

### ACHIEVEMENTS

- July 15, 2011 Graduated as **Valedictorian** 2010-2011  
July 1, 2011 Awarded the **Nexen Prize** for the highest academic achievement

### SKILLS

#### Languages

- + **French:** native language, **English:** fluent, **Spanish:** elementary

#### Computer

- + **Concepts:** Architecture, Multimedia, Security, Relational Databases, Distributed & Advanced Databases, High-Performance Computing, Object-Oriented, Complexity, Hadoop
- + **Software:** Oracle, Eclipse, NetBeans, X-Code, Adobe (Dw, Ps, Sb, Fl)
- + **Languages:** C/C++, Objective-C (iOS), JAVA, ARM, Python, OpenGL (Glut), Linux BASH, L<sup>A</sup>T<sub>E</sub>X, MySQL, SQLite, Oracle PL/SQL, AS 2&3, JS, jQuery, OOP PHP5, HTML5/CSS3, XML (XPath, XQuery, DTD, XSD, XSLT), AJAX

#### Leadership

- + Elected twice as President of ASSERP, the Student Association in Ponsan-Bellevue (Toulouse – France). I coordinated the management of over ten societies, each with their own president
- + Head Judge for the international game *Magic: The Gathering* in Nice – France
- + Lead several university group projects to their completion and success

#### Communication

- + When working for Amadeus, supervised an intern for three months on his Django project, which had to deal with monitoring and comparing versions in our replicated data.
- + Judge for *MTG*, communication within a team and communication with players. Most of the tournaments had over 120 players and last for over 14 hours
- + Worked as part of customer facing teams in Pizzerias, Restaurants, Tea house
- + Led training courses for students in school: Technology in Middle School, Montauban – France
- + Led campus tours at RGU, Aberdeen – Scotland

## WORK EXPERIENCES

October 2012 - Now                      IT Engineer                      Nice Area – France

Member of the Data Replication team within Amadeus' Middleware department. Mainly focused on R&D tasks, I worked on:

- + designing new solutions to improve overall performance (reduce network overload, normalized and denormalized database designs, atomicity on fallbacks).
- + data replication over thousands of nodes. The type of data is static (countries, time zones, holidays from IATA) and extremely dynamic (any application within Amadeus can use our Framework).
- + designing and implementing abstract types across several containers (Oracle/Sqlite/C++) to erase our legacy data type discrepancies over the different parts of the data flow.
- + various scripts to prototype or automatize tasks: storage / retrieval / backup / cleanup logs and test results after each build on our test systems; monitoring file system changes that follow a given pattern using Pyinotify (a Python wrapper for inotify), ...
- + exporting data from our caches into two iterations of XMLs, generating XSLTs and XSDs from meta-XSLTs. This design allowed us to publish XML data into past and present schema versions.
- + maintenance, support and point of contact for our applications.

May 2012 - August 2012                      MSc Dissertation                      Edinburgh – Scotland

Design and implementation of an online concurrent Open Source Framework for multiplayer board games. It must be a real-time asynchronous server-side event-driven solution. The aim is to deliver a robust product to the Open Source Community, as there is none that exist at the moment.

Summer 2011                      Freelance                      Montauban – France

Creation of the website [www.qualigraphe.com](http://www.qualigraphe.com), visual communication specialist and creation of a light CMS with a few modules: a news engine, email engine, and some customized modules required by the client (website can be populated through MS Excel). The client provided the visual design of the website.

October 2011 - May 2012                      Honours Project                      Aberdeen – Scotland

*Modular Web Protection for Multi User Licensing Utilities* (MPW-Mulu for short) is a piece of software that allows web developers to generate alternative revenues through licensing so they do not have to disclose the source code of their products. The idea is to store the critical parts in a remote server and then to sell a non-complete version of the product. The sold product would then need to retrieve the missing bits after authenticating and to execute them on-the-fly. The original idea, implementation of the challenging solution and the proof that the solution would not be viable in a cheap environment have brought me a double-A.

February - May 2009                      Training School                      Montauban – France

Technology in Middle School. Observing, helping students, assisting the teacher and lecturing on my own for the last session. School name: *Collège Ingres*, Montauban – France

June - August 2008                      Internship                      Toulouse – France

Creation of [www.amar-abraham.fr](http://www.amar-abraham.fr), a fashion designer website. Done in PHP/JS/HTML/CSS.

October - November 2007                      IT Maintenance                      Toulouse – France

*CROUS de Toulouse* is a public governmental company. They deal with everything related to studies and students in the Academy of Toulouse. My job there was to set up WIFI installations on two student campuses. I was recommended for the job by the one of the campus directors.

## MISCELLANEOUS

French driving license

**TOEFL iBT** (June 25, 2011): **107/120**

(Reading 23/30, Listening 27/30, Speaking 29/30, Writing 28/30)

## HOBBIES

Software development, Web development, weightlifting (5 years), Tennis (1 year), Go (also named Baduk, Weiqi, Weichi), MahJong MCR, travelling, baking

## REFEREES

Professor Fan Wenfei      [wenfei-at-inf.ed.ac.uk](mailto:wenfei-at-inf.ed.ac.uk)      <http://homepages.inf.ed.ac.uk/wenfei>

Dr. Niccolo Capanni      [niccolo-at-capanni.co.uk](mailto:niccolo-at-capanni.co.uk)      <http://www.linkedin.com/in/capanni>