SAMUEL GIFFARD

65 ave. Borriglione
06100 Nice, 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, GDB, Valgrind, Adobe (Dw, Ps, Sb, Fl)

  + **Languages**: C/C++, Objective-C (iOS), JAVA, ARM, Python, Django, OpenGL (Glut), Linux BASH, LaTeX, 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

  + In Amadeus, supervised interns for three months on Django and for six months on Node.js / Aria Template.

  + 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 (C++, Python, Sqlite, Oracle) | 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.
+ designed and implemented modified Hepburn algorithm for Japanese transliteration.
+ decommissioned legacy terminal entries from IBM TPF system into Amadeus' new C++ architecture: OBE.
+ maintenance, support and point of contact for our applications.

| May 2012 - August 2012 | MSc Dissertation (Python/Django, JS, HTML5/CSS3, LaTeX) | 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 (PHP, JS, HTML5/CSS3) | Montauban – France |

Creation of the website 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 2010 - May 2011 | Honours Project (PHP, JS, HTML/CSS) | 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 (PHP, JS, HTML/CSS) | Toulouse – France |

Creation of www.amar-abraham.fr , a fashion designer website.

| 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 | http://homepages.inf.ed.ac.uk/wenfei |
| Dr. Niccolo Capanni | niccolo -at- capanni.co.uk | http://www.linkedin.com/in/capanni |