

## SAMUEL GIFFARD

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### Python Trainer, Engineer & Evangelist

#### EDUCATION

- 2011 - 2012 MSc Computer Science University of Edinburgh – Scotland  
+ **MSc Computer Science with Distinction** in Computer Systems, Software Engr. and High Perf. 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, **Dutch:** learning

##### Computer

- + **Concepts:** Architecture, Multimedia, Security, Relational Databases, Distributed & Advanced Databases, High-Performance Computing, Object-Oriented, Complexity, Hadoop
- + **Software:** Oracle, PyCharm, Eclipse, NetBeans, X-Code, PDB, GDB, Valgrind, Adobe (Dw, Ps, Sb, Fl)
- + **Languages:** **Python**, Django, **C/C++**, Linux BASH, MySQL, SQLite, **Oracle PL/SQL**, Objective-C (iOS), JAVA, ARM, OpenGL (Glut),  $\text{\LaTeX}$ , JS, jQuery, PHP, 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 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

- April 2017 - Jan. 2018                      Software Engineer (Python, Django, MariaDB, Postgres, Docker)    Hasselt – Belgium  
MVP Developer for **Unleashed** (mobile telco) in a Kanban + Squad environment.  
+ Studies, performance tuning, implementation of new features, bugfix and code reviews.
- Since July 2016                              Independant Python Contractor                              Nice Area – France  
+ Private financial market project. Various Python & Django missions.  
+ Python trainer for **AlterWay**, St Cloud, France.
- Feb. 2016 - June 2016                      IT Executive (Java, Python, R-Pi, Linux)                              Nice Area – France  
Lightning Project for **PwC** (IoT & B2B, Raspberry Pi), through SII. Creation of :  
+ Generic persistence layer, called in REST and its Json implementation. Java / ServiceMix / Karaf.  
+ System Watchdog taking XMPP commands with a module-defined grammar. Python / Shell/ smx / init.d.  
+ Several Python scripts (eg. DTMF & Morse Code wrapping SoX).  
+ Front-End : HTML, Bootstrap & uikit, Angular 1.5.
- Nov. 2015 - Feb. 2016                      IT Engineer (PHP, Java, C++, Linux)                              Nice Area – France  
Classified project for **Airbus D&S**, through Antyas. It involved, among others, SPOT satellites' image processing.
- Oct. 2012 - July 2015                      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 after each build...  
+ 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 - Aug. 2012                      MSc Dissertation (Python/Django, JS, HTML5/CSS3, L<sup>A</sup>T<sub>E</sub>X)    Edinburgh – Scotland  
Design and implementation of an online concurrent Open Source Framework for multiplayer board games. It had to be a real-time asynchronous server-side event-driven solution.
- Summer 2011                                  Freelance (PHP, JS, HTML5/CSS3)                              Montauban – France  
Creation of the website [www.qualigraphe.com](http://www.qualigraphe.com), and of its custom modular CMS. Visuals provided by the client.
- Oct. 2010 - May 2011                      Honours Project (PHP, JS, HTML/CSS)                              Aberdeen – Scotland  
Created a piece of software that provides protection and license management to web developers.
- Feb. - May 2009                              Observation placement in Middle School (Technology)                              Montauban – France
- June - Aug. 2008                              Internship (PHP, JS, HTML/CSS)                              Toulouse – France
- Oct. - Nov. 2007                              IT Maintenance for **CROUS de Toulouse** (public establishment)    Toulouse – France

## 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), climbing, Go (also named Baduk, Weiqi, Weichi), MahJong MCR, boardgames, travelling, baking

## REFEREES

Professor Fan Wenfei	<a href="mailto:wenfei-at-inf.ed.ac.uk">wenfei-at-inf.ed.ac.uk</a>	<a href="http://homepages.inf.ed.ac.uk/wenfei">http://homepages.inf.ed.ac.uk/wenfei</a>
Dr. Niccolo Capanni	<a href="mailto:niccolo-at-capanni.co.uk">niccolo-at-capanni.co.uk</a>	<a href="http://www.linkedin.com/in/capanni">http://www.linkedin.com/in/capanni</a>