

## **Alberto Franco - Curriculum vitae et studiorum**

Name: Alberto Franco

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### **Objectives**

Considering how large is the effort required to keep up to date with the progress of computer science and engineering, I would like to work side-by-side with experts that can first teach me and then discuss what is the best choice both to satisfy customer's needs and to write good software, in an environment where I can also contribute actively. I love programming languages theory, computer graphics and embedded system development and I want to learn how to produce ever better software. During my study career I have put an increasingly enthused effort in the subject of the study. This is proved by constantly increasing marks. I think that I can improve even more and I will strive to do so.

### **Work Ambitions**

What I like most is research and development in the areas of computer science that I am passionate such as embedded systems, computer graphics and programming languages. I think that my best qualities are:

- The steadiness I put in pursuing my objectives
- The self-irony with which I face all of the difficulties in my projects
- The need for deeper understanding of things that makes me want to continue to learn
- The honesty in talking to people

### **Education**

*Current: Master Degree in [Computer Science at University of Padua](#)*

#### **October 2010 – September 2012**

Average grade 28.14/30 (93.6%), expected final grade considering below-average thesis evaluation: 110/110 (100%). "Programming Languages" curriculum. My master degree focused on the study of the theoretical basis of computer science. This choice was driven by a personal need for deeper understanding of what is under the hood rather than acquiring practical skills as I did in the bachelor degree.

- Static Analysis and Software Verification: 30 cum laude/30 (100%)
- Elements of Bioinformatics: 26/30 (86.7%)
- Computability and Algorithms: 27/30 (90%)

- Digital Image Processing: 30/30 (100%)
- Logic Foundations of Functional Languages 27/30 (90%)
- Programming Languages: 28/30 (93.3%)
- Languages and Models for Global Computing: 29/30 (96.7%)
- Wireless Networks: 27/30 (90%)
- Open-Source Technologies: 27/30 (90%)
- Approximation Algorithms: 30/30 (100%)
- Advanced Programming Languages: 30 cum laude/30 (100%)
- Real-Time Systems: 27/30 (90%)

*Bachelor Degree in [Computer Science at University of Padua](#)*

**October 2007 - July 2010**

Graduated with 100/110 (90%) on 23<sup>th</sup> July 2010. Thesis title: *Solution Strategies for Linear Sparse Matrices with GPGPU and Multi-Core Technologies*. Thesis project consisted in the creation of a sparse linear solver with CUDA and C++ to use in FEM applications. I decided to attend computer science after quitting physics to further my passions for computer graphics and programming languages. I discovered new passions in system and embedded programming after attending the “Operating Systems” class and a constantly increasing interest in computer science and all of its facets so I decided to continue with the master degree.

- Algorithms and Data Structure 20/30 (66.7%)
- Automata theory, Languages and Calculability 24/30 (80%)
- Graph Theory, Probability and Statistics 18/30 (60%)
- Object-Oriented C++ Programming 25/30 (83%)
- Operating Systems 29/30 (96%)
- Algebra and Geometry 29/30 (96%)
- Mathematical Analysis 30/30 (100%)
- Computer Architecture 24/30 (80%)
- Database 30/30 (100%)
- Numerical Analysis 20/30 (66.7%)
- Mathematical Logic 19/30 (63.3%)
- C Programming 29/30 (96%)
- Concurrent and Distributed Java Programming 24/30 (80%)
- Computer Networks 23/30 (76.7%)
- Computer Business 28/30 (93.2%)
- Computer Graphics and Multimedia 24/30 (80%)
- Software Engineering 24/30 (80%)

*Bachelor Degree in [Physics at University of Padua](#)*

**October 2006 - September 2007**

Quit course after the first year. Passed four exams out of eight from the first year. I decided to quit the course due to a greater interest in computer science rather than in physics.

- Multi-variate Mathematical Analysis

- Principle of Programming
- Physics Lab
- Principle of Chemistry

*High School Degree (Esame di Stato Liceo Scientifico)*

**September 2001 - July 2006**

Graduated with 80/100 (80%) at Liceo Scientifico Primo Levi. Technical-Scientific curriculum (Sperimentazione Brocca).

## **Work Experiences**

*Software Consultant at [Metaverso SNC](#)*

**September 2010 - April 2012**

Various projects for Metaverso's customers and for internal use. Use of C++, C#, Adobe Actionsript, Lua for the creation of real-time 3d, web and mobile applications. Project included the creation of augmented reality and Unity3D prototypes, kinect data acquisition tools and various interactive 3d exhibit for local museums.

*Software Engineer at Alestea SRL*

**April 2010 - August 2010**

Internship for Bachelor Degree Thesis. Development of a linear solver to use in FEM applications with C/C++ and CUDA. Development of other various C/C++ and OpenGL components to use in internal CAE applications.

*Senior Programmer at Alestea SRL*

**June 2009 - September 2009**

Internship. Development of a Spline (NURBS and Bezier curves) module in C/C++, OpenGL and MFC for internal use in CAE applications.

*Senior Programmer at [WebTinTin SNC](#)*

**June 2008 - September 2008**

Internship. Development of various web components in Adobe Actionsript, Javascript, PHP, HTML and CSS for WebTinTin customers.

## **Skills**

*Programming Languages*

Strong skills in C/C++, Python, Java, Lua, ActionScript, Scala . Good skills in Google Go, Erlang, Ada. Good knowledge of C++ standard libraries and serveral frameworks such as Qt, OpenGL, GLSL, MFC, SDL, CUDA. Good knowledge of web programming environment and languages.

### *Development environment*

Good knowledge of several IDE such as Eclipse, Netbeans, Kdevelop, Visual Studio and QtCreator. Knowledge of several other development applications such as CMake, Ant, SVN, git, mercurial, argoUML, various issue tracking and wiki systems.

### *Known Languages*

- Italian, native fluency
- English, good fluency. Certified with Cambridge FCE
- French, basic knowledge

### **Other Interests**

I play guitar in my spare time and I used to play with a couple of bands some years ago. I used to act in theater with some friends of mine, just for fun. We staged a couple of pieces between 2005 and 2009 ranging from movie adaptation as “Il Marchese del Grillo” to Latin plays such as Plautus' “Casina”. Art in general is something that really interest me, living in the Venice area give me the opportunity to visit and enjoy frequent art and history exhibitions. The one that I prefer the most is the “Biennale” of Modern Art in Venice, every two years artists from all around the world come to Venice to showcase their masterpieces and it is incredibly stimulating to enjoy those piece of art. I was also a passionate judoka and runner, I still run in my spare time to relax and work out.