

Curriculum Vitae

Personal information

First name(s) / Surname(s) **Marco Bonifazi** - <http://www.bonifazi.eu>
Address
Mobile
E-mail(s) marcobonifazi << I hate spam >> gmail.com
Nationality Italian
Date of birth
Gender M

Desired employment **Software engineer in embedded systems and/or computer graphics**

Work experience

Dates	19 April 2010 →
Occupation or position held	Software Design Engineer
Main activities and responsibilities	Optimization, debugging, profiling of computer vision software for mobile phone. Developing in C++ on Android platform, using OpenCV
Name and address of employer	Anteleon Imaging Systems av. Industrielle 4. CH-1227 Geneva Switzerland
Type of business or sector	Computer vision software on embedded systems
Dates	1 December 2009 → 18 April 2010
Occupation or position held	Design Engineer
Name and address of employer	Imagination Technologies Ltd, Home Park Estate - Kings Langley Hertfordshire - WD4 8LZ
Dates	21 April 2008 → 30 November 2009
Occupation or position held	Graduate Design Engineer
Main activities and responsibilities	OpenVG driver implementation for SGX Graphics Processing Unit. Developing in C language and assembly on Linux platforms; mainly focused on image filtering APIs, either by software and by SGX assembly, using custom pixel shaders and its fast hardware mechanisms. Good command of the hardware/software interactions and the limitations in an embedded system environment. Good knowledge of the 2D/3D graphic pipelines, realtime rendering issues. Quite comfortable with gdb debugging, bug fixing, multiplatform code writing, static analysis of the software.
Name and address of employer	Imagination Technologies Ltd, Home Park Estate - Kings Langley Hertfordshire - WD4 8LZ
Type of business or sector	Computer graphics on embedded systems
Occupation or position held	Software Developer and Designer
Main activities and responsibilities	Creation, design and development of CAD software for civil engineering. Designed using Unified Process, MVC, UML, design patterns. Developed in Python, Gtk+, OpenGL, the software gives the possibility of planning and drawing structural elements managing the input data by GUI, providing some interactions (zoom, movement, selection) directly using OpenGL. The software produces technical designs and drawings, structural calculations; it allows exporting DXF sheets, printing PostScript drawings, generating RTF reports.
Name and address of employer	S.A.I.C. Italia, Via Crescenzo 86 - 00193 Roma - Italy
Type of business or sector	Civil engineering
Dates	June 2009 →
	Maintaining the Glade installer for Windows Created the Windows installer for the accounting software PromoGest

Education and training

Dates 12/2004 - 12/2007

Title of qualification awarded
Principal subjects / occupational skills covered

Master's degree in Computer Science Engineering - Final score: 110 / 110

Thesis:

"Vectorial interface to an expert system for structural drawing of reinforced concrete slab structures", a software for civil engineers.

Sources/slides/pdf files of the following thesis reports/projects, developed during the university courses, are available online:

<http://www.bonifazi.eu>

Algorithms and data structures, graph drawing: Sorting algorithms, queues, stacks, trees, asymptotic notations, hash tables, graph traversals. Application for area minimization of orthogonal graph drawings in C language.

Computer graphics: graphic pipelines, transformations, animations, rendering, OpenGL API. Simple robot in 3D environment realized in C and OpenGL.

Concurrent programming: small webserver project in C, processes handling, threads in C and Java
Software engineering: pattern and UML, Unified Process, views and perspectives in software development cycle

Databases: E/R, Sql, conceptual and logic model, normalization, relational algebra, dataware housing, transaction theory. Small project about feeding a datamart, from OLTP to OLAP

Networking: network architectures and management, ISO/OSI, standard protocols

Web technologies: developed an application in JSP, Tomcat, Struct, Torque, PostgreSQL. Samba network realized.

Cryptography: main cryptographic methods and algorithms, RSA and prime numbers homework

Artificial Intelligence and functional programming: formal, modal logic, project about Image Retrieval methods in the Intrusion Detection, functional programming with OCaml

Telecommunications: analog and digital signal processing; information and coding theory

Digital elaboration: analog/digital data processing in Matlab Simulink.

"Roma Tre" University

Name and type of organisation providing education and training
Level in national or international classification

ISCED 5A

Dates

09/1999 - 12/2004

Title of qualification awarded
Principal subjects / occupational skills covered

Bachelor's degree Computer Science Engineering - Final score: 99 / 110

Thesis :

"Introduction to finite elements methods and domain discretization for field solutions"

"Roma Tre" University

Name and type of organisation providing education and training
Level in national or international classification

ISCED 5A

Personal skills, competences

Mother tongue(s)

Italian

Other language(s)

English

Self-assessment
European level (*)

English

Understanding				Speaking				Writing	
Listening		Reading		Spoken interaction		Spoken production			
C1	Proficient user	C2	Proficient user	C1	Proficient user	C1	Proficient user	C2	Proficient user

(*) [Common European Framework of Reference \(CEF\) level](#)

Technical skills and competences

Good command of software design and development, comfortable with embedded systems
good background of maths and computer graphics theory

Computer skills and competences

Languages and libraries: C, GTK+, Python, OpenGL, Java (the five most used) C++, OCaml, Pascal, Clipper, DB3 (used several years ago or basic knowledge)

Scripting and other: PHP, JSP, Java Servlet, Shell, HTML, LaTeX, Samba networks, UML in UP

Databases: PostgreSQL, MySQL

Applications: (Open)Office, Matlab (Image Processing toolbox and Simulink), emacs

Operating Systems: Linux/Gentoo-Ubuntu, Windows

Driving licence(s)

B

Additional information

Personal interests:

