

Personal information

Name / Surname  
Telephone  
Personal Email  
Nationality  
Date of birth

Pignotti Alessandro

Professional Experience

Date (from-to)  
Activity  
Date (from-to)  
Activity  
Details  
Date (from-to)  
Activity  
Date (from-to)  
Activity

**September 2012 - Now**  
Founder and CTO at Leaning Technologies Limited  
**February 2012 - September 2014**  
Independent engineering consultant  
Custom development and debugging on full-stack client/server applications. Custom solutions based on Android, Wine.  
**October 2011 - January 2012**  
Software Engineering intern at Adobe corporation  
**October 2006 - July 2011**  
System Administrator of the intranet and internet facilities on behalf of the students of the Sant’Anna School of Advanced Studies

Education and Training

Date (from-to)  
Title of qualification awarded  
Name and type of organization  
Thesis  
Date (from-to)  
Title of qualification awarded  
Name and type of organization  
Principal subjects  
Date (from-to)  
Activity

**December 2009 - May 2012**  
Master’s degree in Computer Engineering (110/110 cum laude)  
UNIVERSITY OF PISA [www.unipi.it]  
Adaptive Data Parallelism for Internet Clients on Heterogeneous Platforms  
**October 2006 - October 2012**  
Student of the Sant’Anna School of Advanced Studies. Holding a full scholarship won in a national competition (11 scholarships , 230 participants). The courses taken are complementary to the ones offered by the University of Pisa and deepen particular topics.  
SANT’ANNA SCHOOL OF ADVANCED STUDIES [www.sssup.it]  
Mathematics (variational calculus, partial derivative differential equations, frequency domain calculus, linear and non-linear programming, statistics), Physics (statistical thermodynamics), Computer Science (parallel computing, physical modeling/simulation, algorithm complexity, neural networks), Genetics  
**August 2009 - October 2009**  
Internship with Prof. Giovanni Vigna and Christopher Kruegel at the Security Lab, University of California Santa Barbara

Projects

Date (from-to)  
Project  
Details

**October 2013 - Now**  
Design and implementation of Cheerp (previously known as Duetto): a C++ compiler for the Web [http://leaningtech.com/cheerp/]  
Cheerp is a software that compiles C++ applications to binary code and Javascript, allowing you to write high-performance, client-server distributed applications in a single C++ codebase.

Date (from-to)	<b>November 2008 - December 2012</b>
Project	Design and implementation of an efficient, open source Flash Player [ <a href="http://www.lightspark.org">http://www.lightspark.org</a> ]
Date (from-to)	<b>August 2009 - October 2009</b>
Project	Design and implementation of an efficient Dynamic Binary Instrumentation Framework
Reason	Internship at the Security Lab, University of California Santa Barbara
Date (from-to)	<b>September 2008 - October 2008</b>
Project	Worked on the development, assembly, control and tele-operation of a six-legged robotic platform [ <a href="http://pesapod.blogspot.com/">http://pesapod.blogspot.com/</a> ]
Reason	Partecipation to the ESA Lunar Robotics Challenge

## Publications

*A. Pignotti, A. Welc, and B. Mathiske* 'Adaptive Data Parallelism for Internet Clients on Heterogeneous Platforms' in Proceedings of the Dynamic Languages Symposium 2012, Tucson, Arizona, USA, October 2012

## Professional skills

### Technical skills

Advanced knowledge:

- Operating systems: Linux (Debian, Ubuntu, Gentoo, LFS), Windows Workstation and Server
- Programming: C, C++, C++11, JavaScript
- Machine Language: Assembler x86, x86\_64, MMX/SSE extensions, MIPS
- Executable disassembling and analysis
- Virtual Machine Architectures, Just-In-Time compilation
- Libraries: Standard Template Library, LLVM, OpenGL
- Knowledge of the major end-user applications (e.g. Office Suite)

Good knowledge:

- Scripting: Bash
- Programming: Java, Python, C#, Ruby
- Documentation: Doxygen
- Simulation and numerical analysis: Matlab
- Services administration: Dns, Dhcp, Virtualizazion (Xen), Printing (Cups)
- Typesetting:  $\text{\LaTeX}$
- Database: Mysql, SQLite
- Web: Html, Css, Php
- Services administration: Www (Apache)

Basic knowledge:

- Operating systems: FreeBSD
- Services administration: Ldap, OpenVpn

### Mother tongue

*Self-assessment  
European level<sup>(\*)</sup>*

**English**

**Dutch**

**French**

**Spanish**

### Italian

Understanding		Speaking		Writing	
Listening	Reading	Spoken interaction	Spoken production		
C1 Proficient user	C2 Proficient user	C1 Proficient user	C1 Proficient user	C1	Proficient user
B1 Independent user	B2 Independent user	B1 Independent user	B1 Independent user	B1	Independent user
A2 Basic user	A2 Basic user	A1 Basic user	A1 Basic user	A1	Basic user
A2 Basic user	A2 Basic user	A1 Basic user	A1 Basic user	A1	Basic user

<sup>(\*)</sup> Common European Framework of Reference (CEF) level