



Salvatore Tomaselli

Curriculum Vitae

Education

- 2007–2011 **B.S. Computer science**, *Università degli studi di Catania*, GPA 110/110.
with honors
- 2011–2013 **Msc Computer Systems and Networks**, *Chalmers tekniska högskola*, Göteborg,
GPA 4.2/5.

Publications

- Title Towards Lightweight Logging and Replay of Embedded, Distributed Systems
- Authors Salvatore Tomaselli, Olaf Landsiedel
- Description In this paper we introduce MILD; providing Minimal Intrusive Logging and Deterministic replay.
- In ASCoMS 2013
proceedings

Masters Thesis

- Title Debugging Wireless Sensor Networks with Incremental Snapshots
- Supervisor Professor Olaf Landsiedel
- Description This thesis introduced a tool to capture event from a wireless sensor network, where nodes use TinyOS, and allow deterministic replay of the network inside a simulator.

Bachelor Thesis

- Title Sviluppo di server web e sistema di caching per contenuti dinamici
- Supervisor Professor Giuseppe Pappalardo
- Description This thesis was focused on the implementation of an HTTP/DAV server that can cache and invalidate server-generated responses, leading to greatly reduced IO and CPU loads.

Skills

Languages	In order of experience: Python, C, nesC, Java, PHP, Javascript
Databases	PostgreSQL, administration experience as well MySQL
Frameworks	Django, QT, Posix
Software	Debian, GNU Autotools
Technical	Good knowledge of design patterns, modular design and OOP, to organize larger projects. Experience in making C code work on various POSIX platforms. Familiar with the concepts of functional programming
Github	https://github.com/ltworf/ Notable projects
weborf	A HTTP/DAV server, implemented in C. https://github.com/ltworf/weborf
Canary	Dynamic library to monitor for heap overflows, implemented in C. https://github.com/ltworf/canary
Relational	Relational, a relational algebra parser/compiler/optimizer, used as educational tool in a few universities. Implemented in Python Internally can parse and compile queries to Python, and perform some optimizations on the parse tree. It provides a GUI for ease of use. https://github.com/ltworf/relational
worfcc	A compiler, for a university course, that targets LLVM and JVM. Implemented in Jython and Java. https://github.com/ltworf/worfcc
chinese-checkers	In a project course at university, for artificial intelligence, I was part of a team of 4 people implementing Chinese Checkers. The project includes a GUI client, a textual client, a server, and some bots that implement different algorithms to play the game. https://github.com/ltworf/tin171
Galileo	The entire web interface of the server http://galileo.dmi.unict.it , implemented in PHP, that allows users to register, require new services, register new projects, manage permissions of other users participating in the projects. An administrative page allows administrators to post news, delete projects and users, and inspect scheduled operations to block them or perform them immediately.

Experience

- 2007-2012 **Student's server system administrator**, *Università degli studi di Catania*, Catania.
Maintain the Student server, install/configure services and develop web interfaces in PHP to use them.
Manage PostgreSQL database, mail service (Postfix+Dovecot) and webserver (Apache 2).
Implement a web interface to provide the users means to register projects, with git/svn access and a wiki.
Various tools to scan the logs and report activity, among the others one scans the access to the projects and notifies the owners of which websites contain links to their project.
- 2006 **Developer**, *Tau Marmi S.r.l.*, Catania.
Develop a tool to connect with industrial machines and periodically store the log. Implement a client to connect and reproduce the GUI of the machine, showing the last known status.
Develop a tool to count worked hours of the employees, and print monthly reports in PDF.

Social skills

- I am an easy going person, passionate about software and about making things right.
- Debian At the present time I am a Debian Maintainer (DM), and I've been involved in some of the more general decisions affecting the entire distribution.
I maintain mostly packages in C and Python; the most used of them is xinetd.
- Chalmers In August 2012 I was part of the reception of new students in Chalmers, so I was assigned a group of new students and had to tell them about life in Sweden, and involve them in social activities.

Languages

- Italian **Mothertongue**
English **Fluent**
French **Basic**

Interests

- Music
- SCUBA diving
- Board games
- Literature

Other

I am physically disabled, and I am mentioning it because some countries have specific legislation regarding it.