

# 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 Deter-

ministic replay.

In ASCoMS 2013

proceedings

#### Masters Thesis

Title Debugging Wireless Sensor Networks with Incremental Snapshots

Supervisor Professor Olaf Landsiedel

Description This thesis intoduced 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- In a project course at university, for artificial intelligence, I was part of a team of 4

checkers 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, imple-

mented in PHP, that allows users to register, require new services, register new

projects, manage permissions of other users partecipating 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

2013- Backend Python Developer, Duego, Göteborg.

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

Board games

SCUBA diving

Literature

#### Other

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