

Salvatore Tomaselli

Curriculum Vitae

Education

2011–2013 **Msc Computer Systems and Networks**, *Chalmers tekniska högskola*, Göteborg, *GPA 4.2/5*.

2007–2011 **B.S. Computer science**, *Università degli studi di Catania*, GPA 110/110. with honors

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, MongoDB, Redis, Elasticsearch

Frameworks Django, Qt, Flask

Software Debian, GNU Autotools, Git, SaltStack, Jenkins, unittest

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

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

 ${\sf lapdog} \quad {\sf C} + + \ {\sf daemon} \ \ {\sf that} \ \ {\sf uses} \ \ {\sf ICMP} + {\sf ARP} \ \ {\sf to} \ \ {\sf generate} \ \ {\sf events} \ \ {\sf upon} \ \ {\sf appearing} / \ {\sf disappearing}$

of network devices.

https://github.com/ltworf/lapdog

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

Experience

2013-2014 Backend Python Developer, Duego, Göteborg.

The position involved writing and maintaining a REST API in Python for the clients to use, and managing the servers (production and staging).

The API code was based upon different technologies: Flask, Redis, Elasticsearch, Mongodb. For the staging and production environment I had to work with AWS, autoscaling, Jenkins, saltstack, graphite, New Relic and several tools that were developed in house.

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.

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.

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*\infty http://ltworf.github.io/ltworf/

Social skills

 $\ensuremath{\mathsf{I}}$ am an easy going person, passionate about software and about making things right.

Debian At the present time I am a Debian Maintainer (DM).

I maintain mostly packages in C and Python; the most used of them is xinetd.

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.