# Curriculum Vitae

### Personal Data

Name Fernando Tarín Morales

Nationality Spanish

E-mail tarin.f@gmail.com

# **Higher Education**

2004 - 2010 Technical University of Valencia

Computer Engineering, Specialization in Software Engineering

2010 - 2011 Technical University of Valencia

Master in Software Engineering, Formal Methods and Information

Systems

2013 - now The University of Tokyo

PhD Student at the Computer Science Department

# Knowledge

**Programming Languages:** 

C/C++, Python and Shell Scripting.

Knowledge of Java, Clojure, Prolog and x86 assembler (as).

**Databases:** 

SQL, Deductive Databases (Datalog).

Web Development:

Python + Html

Experience

2013 - now National Institute of Informatics at the National Center of

Sciences of Japan

Research assistant at professor Honiden's laboratory

http://www.honiden.nii.ac.jp/

Since April. Research assistant at professor Honiden's laboratory. Working on internal research groups and my own research thesis

based on logic resolutors and logical computable languages.

2011 - 2012 National Institute of Informatics at the National Center of

Sciences of Japan

Internship at professor Honiden's laboratory

http://www.honiden.nii.ac.jp/

Since October to March. Intern at professor Honiden's laboratory under the supervision of professor Ishikawa working on the development of formal tools, specifically, developing a tool to translate source code between several programming languages.

#### 2010 - 2011

## Technical University of Valencia

Researcher at ELP

http://users.dsic.upv.es/grupos/elp/index.html

Since August to September. Research Fellow in the ELP group working on the use of Datalog for static analysis of Java programs and working in efficient ways to solve such logic specifications. Currently working on ways to improve the efficiency of Datalog.

#### 2009 - 2010

## Technical University of Valencia

Researcher at ELP

http://users.dsic.upv.es/grupos/elp/index.html

From November to July. Fellow of the ministry working in my thesis project: "STRATEGIES FOR THE BOTTOM-UP EVALUATION OF DATALOG PROGRAMS WITH COST WARRANTIES OF TIME AND MEMORY."

The thesis establishes a computational model to create the solver with less cost both in time and memory for the logical language Datalog than the state of the art solvers. Part of this time was also used in the creation and administration of a web application.

http://safe-tools.dsic.upv.es/datalog\_solve/

### **Publications**

Presentation of some parts of my bachelor thesis at the workshop Datalog 2.0 http://datalog20.org/

**Fernando Tarín**, Christophe Joubert, Marco A. Feliú. PROLE 2010.

"Efficient BES-based Bottom-Up Evaluation of Datalog Programs"

**Fernando Tarín**, Christophe Joubert, Marco A. Feliú. AVOCS 2010.

"Evaluation Strategies for Datalog-based Points-To Analyses"

Fernando Tarín, Christophe Joubert, Marco A. Feliú. *Electronic Communications of the EASST:35*, 2010.

"Evaluation Strategies for Datalog-based Points-To Analyses"

**Fernando Tarín**, Fuyuki Ishikawa, Shinichi Honiden. DBPL 2015. "Abstract Rewriting Approach to Solve Datalog Programs"

# **Projects**

### Lince - Main Developer

http://lincetorrent.sourceforge.net/

Bittorrent client developed in C++ and Python

## Wepdecrypt - Main Developer

http://wepdecrypt.sourceforge.net/

Program to audit the security of wireless networks developed in C.

#### **DD-WRT - Patch Contributor**

http://www.dd-wrt.com

Linux-based firmware for a wide variety of wireless routers. I worked on a series of patches to customize and improve the *ADSLPPPoe* tool included with the firmware.

## **GitHub**

#### Sudoku-tools

https://github.com/Nan-Do/sudoku-tools

Tool designed to generate, solve and validate high quality sudokus developed in Python.

## Wspy

https://github.com/Nan-Do/wspy

Wireless intrusion detection system developed in Python.

#### Other Repositories

https://github.com/Nan-Do/

Mainly side projects to explore interesting ideas and repositories with my solutions to some web coding challenges like *Project Euler* (top 2%), *4clojure.com* (all solved), or *codewars*(3 kyu).

### Honors and Awards

2013 Japanese Government (Monbukagakusho) Scholarship.

2010 Spanish Ministry of Education Scholarship.

### Skills and Interests

Languages Spanish (Native), Catalan/Valencian (Native), English (Fluent Toefl:

92), Japanese (Conversational)

Interests Cooking, reading, computers and discrete math.

Taking part on online courses (Coursera, Udacity, etc...). Practicing a healthy life style including nutrition and fitness.

June 14, 2016