#### Personal information

Surname(s) / First name(s)

Address(es)

Telephone(s)

Email(s)

Nationality(-ies)

Date of birth

## Samborski-Forlese, Julián

Av. Valladolid 47(D) 3B, 28008 Madrid, Spain

+34 911 54 23 65 Mobile: +34 695 70 41 30

juliansf@gmail.com, julian.sf@imdea.org

Argentinian, Italian (European Passport)

19th March 1984

#### About me

I'm currently a Ph.D. Student at IMDEA Software, Madrid, Spain. I obtained a Master in Programming and Software Technologies at the Universidad Complutense de Madrid (Spain) on September 2011, and I previously obtained a degree in Computer Science at the Universidad Nacional de Rosario (Argentina) on May 2009. I am currently working on verification of reactive systems using model checking techniques. My main interests include, but in no way limited to, formal methods, software engineering, software development, and large scale systems.

## **Work Experience**

January, 2010 - July, 2010

## **DEIMOS Space, Tres Cantos, Spain**

Development of algorithms for processing of satellite imagery using Nvidia's CUDA technology. The main achievement was a speed-up of up to 200% in the coregistration algorithm by implementing a multi-device version capable of distributing the task throughout many CUDA devices.

2008

### IMDEA Software Institute, Madrid, Spain

7 month internship working on research topics related to the MOBIUS Project.

## **Educational Background**

July, 2009 - to date

IMDEA Software Institute, Madrid, Spain

Ph.D. Student in Computer Science

Advisor: César Sánchez

2010-2011 Course

Complutense University of Madrid, Spain

#### Master in Computer Science Research

Thesis: Two Algorithms for Model Checking of Regular Linear Temporal Logic

Grade Point Average: 8.91 out of 10

May 12<sup>th</sup>, 2009

National University of Rosario, Argentina

"Licenciatura" in Computer Science (5 years with thesis)

Thesis: Preservation of Proof Obligation for Hybrid Verification Environments

Grade Point Average: 9.77 out of 10

#### **Awards**

- Predoctoral FPU Fellowship (from Jan 2012). MICINN, Spain.
- Best (Top 1) GPA in 2009 from the "Licenciatura" in Computer Science.
- Best (Top 1) GPA in 2009 from the Sch. of Exact Science, Engineering and Survey.

## **Publications**

- Julián Samborski-Forlese, and César Sánchez. Bounded Model Checking for Regular Linear Temporal Logic. NWPT 2012.
- César Sánchez, and Julián Samborski-Forlese. How to Translate Efficiently Extensions of Temporal Logics into Alternating Automata. ICTAC 2012.
- César Sánchez, and Julián Samborski-Forlese. Efficient Regular Linear Temporal Logic using Dualization and Stratification. TIME 2012.
- Two algorithms for model checking of regular linear temporal logic.
  Master's Thesis, Universidad Complutense de Madrid, Spain, 2011
- Preservation of proof obligations in hybrid verification environments.
  Master's Thesis, Universidad Nacional de Rosario, Argentina, 2009.
- Gilles Barthe, César Kunz, David Pichardie, Julián Samborski-Forlese. Preservation of proof obligations for hybrid verification methods. SEFM 2008.

## **Teaching Experience**

2006

Ad-Honorem Teaching Assistant at the University of Rosario, Argentina T-321 Functional Programming

# **Computer skills**

Programming

C, Ocaml (expert); PHP (proficient); C++, Objective-C, Java, Python, SQL (prior experience)

#### Personal skills

Mother tongue Other Languages

# Spanish

**Portuguese** - Proficiency level. **English** - Advanced level.

### References

César Sanchez, Ph.D. in Computer Science

Assistant Research Professor at IMDEA Software Institute.

Email: cesar.sanchez@imdea.org

Gilles Barthe, Ph.D. in Mathematics

Research Professor at IMDEA Software Institute.

Email: gilles.barthe@imdea.org