

## Education

2015–Present



**University of Illinois at Urbana-Champaign**

Ph.D. Computer Science

Advisor: Professor Josep Torrellas

Area: Computer Architecture, Parallel Computing, Systems

2011–2015



**Polytechnic University of Valencia (UPV)**, Spain

B.S. Telecommunications Engineering, GPA: 8.9/10, Ranked 2nd in graduating class

Thesis: Numerical Methods for Nonlinear Modeling (Grade: 10/10)

Advisors: Professors Juan Ramón Torregrosa and Alicia Cordero

Overseas studies: Norwegian University of Science and Technology (NTNU), Fall 2014

## Publications

- May 2016 Alicia Cordero, **Antonio Franques** and J.R. Torregrosa, “*Chaos and Convergence of a family generalizing Homeier’s method with damping parameters*”, Nonlinear Dynamics, doi: 10.1007/s11071-016-2807-0.
- June 2015 Alicia Cordero, **Antonio Franques** and J.R. Torregrosa, “*Multidimensional Homeier’s generalized class and its application to planar 1D Bratu problem*”, SeMA Journal, doi: 10.1007/s40324-015-0037.
- May 2015 Alicia Cordero, **Antonio Franques** and J.R. Torregrosa, “*Numerical solution of turbulence problems by solving Burgers’ equation*”, Algorithms 8 (2015) 224-233, doi: 10.3390/a8020224.
- Sept. 2014 Alicia Cordero, L. Feng, **Antonio Franques** and J.R. Torregrosa, “*Stability of a Fourth-Order Family of Iterative Methods for Solving Nonlinear Problems*”, Proceedings of the Ninth International Conference on Engineering Computational Technology, Naples, Italy, doi:10.4203/ccp.105.33.

## Research Experience

2015–Present

**Graduate Research Assistant**, i-acoma group, University of Illinois Urbana-Champaign

Area: Computer Architecture

Topic: Application of extremely high frequency wireless on-chip communications in massive multi-core architectures

Advisor: Professor Josep Torrellas

2013–2015

**Undergraduate Research Assistant**, Polytechnic University of Valencia

Area: Computational Mathematics

Topic: Design of new fast-convergence (high-order) iterative methods for obtaining the roots of a nonlinear system of equations

Advisors: Professors Juan Ramón Torregrosa and Alicia Cordero

## Research Interests

Computer architecture, network on chip, extremely high frequency wireless communications, multi-core and parallel architectures, programmability of parallel systems, computational mathematics

## Industry Experience

Summer 2010



**City Council of Montblanc, Spain**

Systems and Network Administrator Intern

Maintenance of Cisco devices, database management (SQL), and front-end web development (PHP, Javascript, CSS).

## Teaching Experience

Fall 2016

**CS/ECE 439: Wireless Networks, UIUC**

Teaching Assistant

Occasional lecturer. Provided support and advice to 40+ students throughout development process of class projects.

## Projects

(A more thorough list can be found on my personal website: [afranques.com/projects](http://afranques.com/projects))

2016–Present

**Quovis.** Android App for saving, organizing, and retrieving users' favorite locations.

2015–Present

**Lazarius.** Android App for helping reduced-vision people move around cities in real time. Won second prize and Telefonica Award in the 2015 Spanish edition of [Hack For Good](#).

2014–Present

**2 Park.** Android App for managing parking spaces on the street in real time. Won Telefonica Award in the 2014 Spanish edition of [Hack For Good](#).

## Awards, Honors and Scholarships

2017

**ISCA Travel Grant**

2015

**Award for the Second-Best Academic Record**, Class of 2015  
Polytechnic University of Valencia

2015

**Undergraduate Thesis Distinction**  
Polytechnic University of Valencia

Fall 2014

**Erasmus Programme Grant**  
European Commission.

2013–2014

**Undergraduate Research Fellowship**  
Spanish Ministry of Education.

2011–2015

**4-Year Undergraduate Full Tuition Scholarship**  
Spanish Ministry of Education.

## Service

2013

**Incoming Exchange Students' Mentor**  
Polytechnic University of Valencia

## Languages

English	Fluent
Spanish	Native
Catalan	Native