

Education

2015–Present



University of Illinois at Urbana-Champaign, Urbana, IL

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, UIUC

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, UPV

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

Worked on maintenance of Cisco devices, database management (SQL), and front-end web development (PHP, Javascript, CSS, HTML).

Teaching Experience

Fall 2016

CS/ECE 439: Wireless Networks, UIUC

Teaching Assistant

Provided support and advice to 40+ students during planning and implementation of projects.

Projects

(A more thorough list can be found on my personal website: 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

2015

Award for the Second-Best Academic Record, Class of 2015

School of Telecommunications Engineering, UPV

2015

Undergraduate Thesis Distinction (highest grade with honors)

School of Telecommunications Engineering, UPV

Fall 2014

Erasmus Programme Grant

European Commission.

2013–2014

Undergraduate Research Fellowship

Spanish Ministry of Education, Culture and Sport.

2011–2015

15 Undergraduate Class Distinctions (highest grades in class with honors)

School of Telecommunications Engineering, UPV.

2011–2015

4-Year Undergraduate Full Tuition Scholarship

Spanish Ministry of Education, Culture and Sport.

Service

2013

UPV Incoming Exchange Students Mentor

Languages

English

Fluent

Spanish

Native

Catalan

Native