201 N. Goodwin Ave.
Urbana, IL 61801

Antonio Franques

franque2@illinois.edu
+1 (217) 766-0317
afranques.com

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 overall 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