Enrique G. Ortiz

1538 Bullbush Way
Oviedo, FL 32765

Phone: 407-971-0879
E-mail: ortizeg@gmail.com
Website: http://www.enriquegortiz.com

Education

Bachelor of Science, Computer Engineering
Department of Electrical and Computer Engineering
University of Central Florida
Thesis: Outlier Detection Algorithms (Under Development)

Computer Tools and Programming Skills

Programming experience with C, C++, Visual Basic.

Limited proficiency in AutoCad and Matlab.

Experience with both the Windows, UNIX and the Macintosh platforms.

Work Experience

Modern Technology Systems, Incorporated (MTSI) 2002
NASA Summer High School Apprenticeship Research Program (SHARP)
Apprentice
Description: MTSI is a contractor that hired me to work for NASA at the Kennedy Space Center Installation. This took place during a two-month period in which I did a variety of jobs that ranged from building shelves to developing a database.

Research and Mentoring Program (RAMP/Undergraduate Research) 2004-2005
Dr. Beatriz Roldán-Cuenya
Description: Preparation of Size Selected Au Nanoparticles Using Inverse Micelle Encapsulation.

Research and Mentoring Program (RAMP/Undergraduate Research) 2005-2006
Dr. Patrick Schelling
Description: Fundamental Reaction Processes for CO Oxidation at Gold Nanoparticles Studied Using Density Functional Theory.

Dance Instructor 2005-2006
University Performing Arts Center (UPAC)

Description: The dance instructor teaching a class I took resigned his position. I replaced him teaching students from the age of 5 to 15 the fundamentals of Breakdancing and Hip Hop.

Summer Undergraduate Program in Engineering Research at Berkeley (SUPERB) 2006
Description: Conducted a sensitivity analysis on a system developed for intruder tracking using particle filtering and a network of binary sensors.

Robotics Programmer August 2005 – August 2006
Robotics Team at UCF (http://www.robotics.ucf.edu)
Description: I contributed the interface work for the communication between the intelligence and sensor. I also applied a segmentation technique to filter SICK LIDAR points.

Undergraduate Researcher January 2006 - Present
Dr. Michael Georgiopoulos
Description: I explored outlier detection algorithms for the detection of outliers (fault detection) in civil engineering structures and criminal activity.

Honors and Awards

Florida Bright Futures Academic Scholars Award 2003-Present

UCF Scholarship for Academic Excellence 2003-Present

UCF Academic Achievement Award for Fall 2003 Semester 2003

Minority Engineering and Computer Science Programs (MECSP) Award for Outstanding Academic Achievement 2003

Florida-Georgia Alliance for Minority Participation (FGAMP) 2003-2005

National Action Council for Minorities in Engineering (NACME) Scholar 2003-2005

Who's Who at UCF 2005
Description: Each year, UCF selects the top 100 students at UCF for the Who's Who at UCF award. The selection committee is appointed by the Student Body President and selects students in areas of Academics, Athletics, Leadership, and Service. Twenty-thousand magazines are distributed to fortune 500 companies, stand and national legislatures, and local businesses.

College of Engineering and Computer Science at UCF Dean's List 2003-Present

UCF President's Honor Roll 2005

Research and Mentoring Program (RAMP) at UCF 2004-2006

Ronald E. McNair Scholars Program at UCF 2004-2005

Student and Professional Organizations

National Action Council for Minorities in Engineering (NACME) Scholar
2003-Present

The National Society of Collegiate Scholars (NSCS) 2004-Present

Ronald E. McNair Scholar 2004-Present

Tau Beta Pi (National Engineering Honors Society) 2005-Present
- Treasurer 2006-Present

Extracurricular Activities

Intramural Basketball Summer 2005
Fall 2006

Robotics Team at the University of Central Florida 2005-Present

Professional Presentations

Florida Chapter of the American Vacuum Society (FLAVS) March, 2005
Poster Presentation
Title: Preparation of Size Selected Au Nanoparticles Using Inverse Micelle Encapsulation

Showcase for Undergraduate Research Excellence (SURE) April, 2005
Poster Presentation
Title: Preparation of Size Selected Au Nanoparticles Using Inverse Micelle Encapsulation

Ronald E. McNair Scholars Symposium at the University of California – BerkeleyAugust, 2005
Oral Presentation

Title: Preparation of Size Selected Au Nanoparticles Using Inverse Micelle Encapsulation

Ronald E. McNair Scholars Symposium at the University of Central FloridaOctober, 2005
Oral Presentation
Title: Preparation of Size Selected Au Nanoparticles Using Inverse Micelle Encapsulation

Ronald E. McNair Scholars Symposium at the University of Illinois at Urabana-Champaign November, 2005
Poster Presentation
Title: Preparation of Size Selected Au Nanoparticles Using Inverse Micelle Encapsulation

Florida Chapter of the American Vacuum Society (FLAVS) March, 2006
Poster Presentation
Title: Fundamental Reaction Processes for CO Oxidation at Gold Nanoparticles Studied Using Density-Functional Theory

Showcase for Undergraduate Research Excellence (SURE) March, 2006
Poster Presentation
Title: Fundamental Reaction Processes for CO Oxidation at Gold Nanoparticles Studied Using Density-Functional Theory

14th Annual Intelligent Ground Vehicle Competition (IGVC) June, 2006
Placed 6th out of 39 participants in the Navigation Challenge.

Ronald E. McNair Scholars Symposium at the University of California – Berkeley August, 2006
Poster Presentation
Title: Sensitivity Analysis for Intruder Tracking Using Particle Filtering and a Network of Binary Sensors

Publications

Ortiz, E., Ortiz, E. G. Calculus Activity. In Douglas K. Brumbaugh, and David Rock, Authors. Teaching Secondary Mathematics, 3rd Edition . Mahwah, NJ: Lawrence Earbaum Associates, Inc.

Barber, D. J., Becker, B. C., Ortiz, E. G., Gonzalez, F. G. “Calculon.” In the Proceedings of The 14th Annual Intelligent Ground Vehicle Competition. AUVSI, http://www.igvc.org, June 2006.

Ortiz, E. G., Schiff, J., Goldberg, K. “Sensitivity Analysis for Intruder Tracking Using Particle Filtering and a Network of Binary Sensors.” In the Proceedings of SUPERB-IT. Department of EECS. August 2006.