

Ronald A. Gutierrez

321 East Sheridan St. Apt#304
Dania Beach, FL 33004
Home: (954) 925-9344; Cell: (786) 554-3509
Email: rguti006@fiu.edu,
Webpage:<http://faculty.eng.fiu.edu/~ronaldg>

OBJECTIVE

An engineering position utilizing distributing computing, grid design, and computational problem solving skills.

EDUCATION

PhD in Biomedical Engineering, Cumulative GPA: 3.5, Florida International University, Miami, FL, Present

Master of Science in Mechanical Engineering, GPA: 3.5, Florida International University, Miami, FL, April 2003
Thesis: “**Computational Fluid Dynamics on Microcarrier Design in Tissue Engineering**”

Bachelor of Science in Mechanical Engineering, Universidad del Norte, Barranquilla, Colombia, September 1999

PROFESSIONAL EXPERIENCE

Biomedical Engineering Research Assistant, FIU, Miami, FL, August 2004 – Present

- Analyzed three dimensional (3D) tissue engineering bioreactor/scaffold models using computational fluid dynamics.
- Performed fluid mechanics characterization in tissue engineering bioreactors using CFDRC[®] computer software.
- Proposed novel aortic heart valve CAD model for tissue engineering design using Photogrammetry techniques.
- Evaluated handheld CT-scan device for real-time image acquisition by means of *Parallel Processing Computing* (ongoing research).

Mechanical Engineering Research Assistant, FIU, Miami, FL, August 2001 – April 2003

- Implemented computational fluid dynamics to design a tissue engineering scaffold prototype.
- Simulated and manufactured a novel scaffold mold using PRO/E, Mastercam and C.N.C milling machine.
- Improved fluid mechanics characteristics in tissue engineering bioreactors using CFDRC[®] computer software.
- Tutored students in Engineering Analysis of Biological Systems (EABS) including laboratory/computer demonstrations.

Electrician /Lighting Utility, Seminole Hard Rock Hotel & Casino, Hollywood, FL, March 2004 – July 2004

- Performed all preventive maintenance on systems and maintains applicable log books.
- Repaired electrical systems through out the property, including on and off-site facilities.
- Knowledge of Seminole Hard Rock Hotel & Casino’s policies, procedures and schedules to insure minimal interruption to business operations and prioritize projects appropriately.
- Coordinated with internal departments to schedule installations and repairs so as to cause minimal business interruptions.

Auditor Assistant, Applica[™], Weston, FL, July 2003 – March 2004

- Audited returns; tabulated and prepared reports about returned products.
- Formulated standardization of products analysis from Dominican Republic and Canada with Florida return department.

High School Summer Professor, FIU, Miami, FL, May 2001 – August 2001

- Taught and developed curriculum for the 10th and 11th grade physical principles class.
- Implemented effective communications to motivate students.

Design Engineer, Imtec Ltda, Barranquilla, Colombia, June 1998 – April 2000

- Used Mastercam V4.0 software to design solids; supervised assemblies and structures.
- Hands-on experience using conventional lathes, milling machines, and grinders.
- Programmed and supervised work on Numeric Control milling machine.

PRESENTATIONS

“Computational Fluid Dynamics on Microcarrier Design in Tissue Engineering”, Poster presented at the South Florida Biotech 2002 Conference at Florida Atlantic University, on March 7- 2002 and at the 2003 Summer Bioengineering Conference, June 25-29, Sonesta Beach Resort in Key Biscayne, Florida.

COMPUTER SKILLS

*PRO/E, AutoCAD, Mastercam, C.N.C, CFDRC®
Matlab, C++, Visual Basic, P-Basic*

*Windows XP, 2000 Professional, NT, 98
MS Office*

LANGUAGES

Bilingual-English & Spanish; advanced in German

MEMBERSHIPS

American Society of Heating, Refrigeration and Air-Conditioning Engineers (ASHRAE), 2002 – Present
American Society of Mechanical Engineering (ASME), 2003– Present