

JUAN B. GUTIERREZ**PHD STUDENT, BIOMEDICAL MATHEMATICS. FSU**

1640 Eagles Landing Blvd. Apt. 103

Tallahassee, FL 32308

(850) 459-4274

jgutierrez@math.fsu.edu - <http://www.math.fsu.edu/~jgutierrez/>

Education	➤ Currently a 5th Year Graduate Student, Biomedical Mathematics, Florida State University (FSU).	➤ M.Sc Biomedical Mathematics, FSU. ➤ B.S., with honors, Engineering, National University of Colombia (1996).
Areas of Scientific Interest	➤ Pattern classification applied to biological data sets. www.bioclassification.org ➤ Mathematical methods in spatial epidemiology. ➤ Population Dynamics. Mathematical modeling of the use of Trojan genes to cause extinction of invasive species.	➤ Use of conformal mappings to study functional and structural brain anatomy. ➤ Optimization methods applied to protein conformation. ➤ Mathematical modeling of narrative spaces. Interactive and adaptive literary hypertext. www.literatronica.com
Areas of Expertise	➤ Partial differential equations. ➤ Dynamical systems. ➤ Complex analysis.	➤ Large-scale distributed system architecture and development. ➤ Scientific computing.
Recent (2006) Publications	➤ MK Hurdal, JB Gutierrez, C Laing, DA Smith. <i>Shape Analysis for Automated Sulcal Classification and Parcellation of MRI Data</i>. Optimization Methods and Software. Article in Press. 2006. ➤ JB Gutierrez, JL Teem. <i>A model describing the effect of sex reversed YY fish in an established wild population: The use of a Trojan Y chromosome to cause extinction of an introduced exotic species</i>. Journal of Theoretical Biology (JTB). 241 (2006) 333-341. ➤ JB Gutierrez. <i>The use of Hamiltonian cycles to produce adaptivity in literary hypertext</i>. Proceedings of "Bridges Conference 2006: Mathematical Connections in Art, Music, and Science". London, UK.	
Work Experience (1996-Present)	Systems Architect 2000-Present. Information Systems of Florida. Design and implementation of mission-critical system for government and industry, including the Bureau of Epidemiology at the Florida Department of Health. Engineer 1998-2000 Designer of instrumentation systems for oil industry (hardware and software).	Fiction Writer 1997-1998. Sponsored by the National Grants of Culture, Ministry of Culture of Colombia. Two books published. Structural Engineer 1996 – Inprotekto Ltda. Colombia
Technology Certifications	➤ Microsoft Certified Solution Developer for .NET Platform (2004). ➤ Microsoft Certified Application Developer for .NET Platform (2004).	➤ Microsoft Certified Solution Developer (2002). ➤ Microsoft Certified Professional (2002).
Technical Skills	GIS Technology ESRI's ArcIMS and ArcSDE Scientific Software Tools Maple, MATLAB, SciLab, GCG, XPP, SAP90. Programming Languages C++, Fortran, LaTeX, VB.NET, C#, Java, JavaScript, T-SQL, UML, XML, XSL	Databases/DBMS SQL Server, MySQL, Oracle Programming Environments MS Visual Studio, Eclipse, Oracle JDeveloper, Director, Flash., Dreamweaver, Fireworks. Operating Systems Windows, Linux (Red Hat & SuSE), Unix (Solaris), DOS.
References	Dr. Monica Hurdal Assistant Professor Department of Mathematics, FSU 850-644-7183 mhurdal@math.fsu.edu	Christie Luce Surveillance Systems Administrator Bureau of Epidemiology, Florida Dept. of Health 850-245-4444 ext. 2450 Christie_Luce@doh.state.fl.us