

DANIEL DÍAZ CASANUEVA

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<http://daniel-diaz.github.com>

- SKILLS
- **Personal:** Self-learner, intelligent and creative. Passionate about everything I do. Especially interested in applying Functional Programming to Real World problems.
 - **Programming languages**
 - * Expert: *Haskell*, HTML, CSS, \LaTeX .
 - * Experienced: C, SQL, Pascal, PHP, OCaml.
 - * Introduced: Prolog, JavaScript.
 - **Development platforms and tools**
 - * Platforms: Windows, Linux and Mac OS X.
 - * Tools: Git, Vim, Microsoft Office, Adobe Photoshop, Corel Draw Suite, GIMP.
 - **Programming experience**
 - * Data (de)serialization.
 - * Network programming.
 - * Parallel algorithms.
 - * Stream processing.
 - * Domain Specific Languages (DSLs).
 - * Concurrent programs.
 - **Languages:** Fluent English and Spanish.

- ACHIEVEMENTS
- Contributor of the **Haskell Communities and Activities Report (HCAR)** from the nineteenth (November 2010) to the twenty-third edition (November 2012).
 - **Assistant editor** (November 2012 to now). Topology textbook written by Frédéric Mynard and Szymon Dolecki.
 - **Layout editor** (October 2012 to now). The Southern Praxis, Georgia Southern University newsletter.
 - **International Student Exchange Program (ISEP)** academic merit scholarship (May 2012).
 - **MMORPG scripter and system administrator** (2010-2011/2014-present) in a Ragnarok Online private server.
 - **Filakada Leadership Convention**, Organizer (August 2010, January 2011, August 2011). Two days event where more than 2000 people enhanced their social and leadership skills.
 - **Research assistant** (November 2008 to June 2009). Computing statistical reports on aminoacid sequences using Haskell.

- EDUCATION
- **Bachelor in Mathematics**
Universidad de Málaga
2007-2013
 - **Algorithms: Design and Analysis**
Stanford University
Coursera online course (January 2013 to March 2013).
 - **Bachelor of Science in Mathematics**
Georgia Southern University
ISEP exchange student 2012/2013.

WORK EXPERIENCE

- **Tutorial writer.** FP Complete (June-July 2013).
 - * Write interactive tutorials about web applications for professional programmers, with Haskell as the language of choice. See samples [here](#) or [here](#).
- **Tutor in Mathematics** (September 2007 to now).
 - * Assist high school students to improve their mathematical skills.
 - * Prepare graduate students for the GRE test.
 - * Teach Mathematics to college undergraduate students.
- **Audio mastering engineer** and **Music composer.** Freelance (August 2004 to now).
 - * Mix and enhance music quality for the audience.
 - * Compose instrumental tracks for different groups.
 - * Perform as a DJ in concerts.
 - * Editor in a Georgia Southern University radio show.
- **Graphic Designer.** Lumitel (October 2007 to July 2008).
 - * Design illustrations using Corel Draw and Adobe Photoshop.
 - * Communicate with clients through phone conversations and in person meetings to assure customer satisfaction.
 - * Typesetting, proof reading and color adjustment of images.
 - * Use of full color digital printer and copier.
 - * Manual crafting of cartels.

RELEASED PROJECTS

- **processing:** Interactive web graphic applications with *processing.js* as backend. Everything from a safe and typed interface, written in Haskell.
- **HaTeX:** Domain Specific Language (DSL) of \LaTeX , written in Haskell. It includes many combinators and techniques to generate well-formed \LaTeX code.
- **DTC:** DTC (Data To Class) is a theoretical library which transforms systematically data declarations to class definitions.
- **Clipboard:** Simple library for Windows users of Haskell that want to manage their system clipboard.

RECENT PROJECTS

- **wavy:** Sound library, written in Haskell. It includes methods for audio encoding, decoding, synthesis and manipulation. Programmed with efficiency in mind, it is able to manipulate big files in constant time.
- **haskintex:** A program to evaluate Haskell code within \LaTeX and possibly other languages.