

MARCEL RIERA

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EDUCATION

Florida International University, Miami FL

Bachelor of Science in Computer Science Engineering

Summer 2017 - Present

In-major GPA: 3.94 / 4.00

Coursework: *Software Engineering, Data Structures, Algorithms, Database Management, Net-Centric Comp., Data Mining, Programming Languages, Comp. Architecture, Operating Systems.*

PROJECTS

Chess Game Engine

Chess engine based on depth-first search algorithm, extended with alpha beta pruning to reduce search branches. Features bitsets for memory optimization, hashsets for fast move access, move validation, move generation, and Polyglot support for opening strategies. Made in C++ for better performance.

HenryBooks Web Database Management tool

Web application made to browse and manage a book store company database. Features book searching, database browsing, administrator access and add/remove/update database operations. Made using LAMP web stack (Linux, Apache, MySQL, PHP) with custom CSS front-end.

GeekText e-Commerce Website

A book store web application for browsing, commenting/rating and purchasing books. Project developed as a team using Agile Scrum organization. I was responsible for the book display and user commenting/rating systems, both front and back end. Web stack: GlassFish, C# ASP.NET, MS SQL and Bootstrap.

TECHNICAL STRENGTHS

Languages Java, C/C++, Python, C#, F# , JavaScript, SQL, PHP, CSS, Matlab, TCL.

Technologies React, Bootstrap, Apache, GlassFish, Node.js, Express, ASP.NET, MySQL, MS SQL, MongoDB, jQuery, RestAPI, GraphQL, HTML5, JavaSwing, JavaFX.

WORK EXPERIENCE

Research Intern at REU, FIU, Miami FL

June 2019

- Research project team leader.
- Worked with our team in the comparison and extension of network routing protocols.

Research Assistant at FIU, Miami FL

February 2019

- Worked on network communications research area.
- Responsible of developing a network simulation model on C++ using ns-3 library.

Developer at UPE's Sparkdev, FIU, Miami FL

March 2018

- Worked on a team building a company employee management web application.
- Responsible for employee dashboard front-end and input form validation.
- Stack: Node.js, Express, MongoDB, Apollo, GraphQL, React.

OTHER

- 5-star Java, C, Python and SQL rating at HackerRank.com
- 60+ data structure/time complexity solutions on ProjectEuler.org
- Member at UPE, student organization for technology, FIU
- Over 10 years experience working alongside my father on the IT field