

Marcello Sachs | marcello.sachs@gmail.com | (561) 251 6674 | 279 Starr Street, Brooklyn NY 11237

Education

BA in Mathematics from Brown University in May 2010, CGPA : 3.31 / 4.0

Job Experience

Lead Full-Stack Developer (Freelance) for Quill.org Literacy Web App (150k+ users)

October 2014 - March 2016 | reference : peter@quill.org (Founder), kristopherbkelly@gmail.com (Technical Mentor)

- Implemented overhaul of the Learning Management System, which teachers use to create classrooms, invite students, create and assign lessons, and monitor student performance
- Implemented overhaul of the student profile, which students use to access lessons and monitor personal performance
- Implemented integration with Clever and Google Classroom for Single-Sign-On and for importing classroom data

Freelance Full-Stack Developer for Ourgoods.org Bartering Web App (few thousand users)

March 2013 - February 2014 | reference : jen@ourgoods.org

- Debugged and refactored the barter state system, which is used to manage the proposal, acceptance, time-sensitive fulfillment, and cancellation of barter contracts
- Implemented integration with Facebook, which allows users to sign in with their Facebook account and to see whether other users are Facebook friends or have Facebook friends in common
- Implemented feature to allow users to 'hide' their accounts (touched on ElasticSearch integration)

Freelance Full-Stack Developer of Active-X Pain Management Web App (alpha - used by about 30 patients)

November 2013 - July 2014 | reference : gavin@active-x.co.uk

- Implemented web app for assigning a schedule of pain management activities to patients and for monitoring adherence to that schedule
- Implemented a messaging system for communication between health specialists and patients

Freelance Full-Stack Developer of Brownstone Tutors SAT Web App (prototype)

July 2012 - September 2012 | reference : mbrown@brownstonetutors.com

- Implemented a system for creating and presenting rich text questions to students along with an interface to guide the problem solving process

Analyst at Education Investment and Finance Corporation

September 2011 - September 2012 | reference : raza@mainandwall.co (CEO), pepi.mike@gmail.com (manager)

- Created SQL analyses of student loan portfolios owned by UBS Bank and ARAM ABS Group
- Wrote scripts for automating daily upload of portfolio information

Personal Projects (developed between freelance projects)

- Implemented a knowledge management web app allowing users to create socially organized hypergraphs
- Explored design principles and patterns for representing knowledge and ideas in hypergraphs
- Developed a formalism for encoding relationships in a computational object that expands on the expressiveness of a hypergraph, elaborating it in an eighty-page patent application (pending)

Skills

Back end : Ruby on Rails, Arel, PostgreSQL, MySQL, MongoDB; some experience with ElasticSearch, Node.js, PHP, Apache

Front End : Javascript, Ajax, ES6, Flux (Redux), React, Backbone, HTML, CSS, Sass; some experience with D3, Angular

Other : git, Heroku, functional programming (recursive and higher-order functions); some experience with Haskell

Code sample : <https://github.com/marcellosachs/samples>

Related Reading : *Practical Object Oriented Design in Ruby* by Sandi Metz, *Functional Javascript* by Michael Fogus, *Professor Frisby's Mostly Adequate Guide to Functional Programming* by Brian Lonsdorf

Languages : English (native language)