# Carlos F. Ramirez

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#### EDUCATION

University of Puerto Rico at Mayagüez Mayagüez, PR, U.S.A. • B.S. in Computer Science, Department of Mathematical Sciences, 2011

GPA: 3.25

Relevant Experience

### Abarca Health (October 2012 - October 2015)

#### Software Engineer I

- Responsible for maintaining and developing, along with a team of developers, RxPlatform, the core service of Abarca Health.
- RxPlatform is a web application that manages the business logic used to process pharmaceutical claims from nearly one million health insurance beneficiaries.
- Was the leader of several projects, the biggest of which was overhauling RxPlatform from ASP.NET WebForms to ASP.NET MVC.
- Worked daily with ASP.NET WebForms, ASP.NET MVC, C#, HTML, JavaScript, jQuery, Twitter Bootstrap, and T-SQL.

#### Glugr (August 2015 - October 2015)

### Lead Developer

- Worked on developing Glugr, a shopping discount aggregator.
- Used React to handle the front end, and loopback (a Node.js framework) for the back end.
- Also developed jQuery based scripts to scrape web pages and extract shopping deals from them.

#### jHacks (July 2015)

### Developer

- Won first place in the Azure Web Services category in the jHacks 2015 Hackathon at Engine4.
- Developed a check-in web app for barbershops, using Angular for the front end and Azure Web Services for the back end.

#### TechSummit PR (June 2013)

#### Developer

- A civic coding hackathon. Our team was awarded with the "Most Disruptive" distinction.
- Developed AEE Incidents, a Python application that reported electric grid failures via Twitter and SMS.

### Stanford's Machine Learning Course (August 2012 - October 2012)

### $\underline{Student}$

- Enrolled in the online course in Machine Learning offered by Stanford University.
- The course covered the machine learning models of linear and logistic regression, artificial neural networks, and support vector machines (SVMs).
- Implemented and used an artificial neural network to create a handwritten digit character recognition system.
- $\bullet\,$  Used a SVM to create an email spam filter.

### University of Houston-Downtown (Summer 2011)

#### Researcher and Developer

- Developed artificial intelligence software in Java to extract meaningful data from medical texts.
- Used Natural Language Processing (NLP) techniques to extract this data.
- The software went on to tie for first place in an international computer science competition (I2B2, Informatics for Integrating Biology and the Bedside).
- Our team's average accuracy rate in extracting meaningful data was 91.2 percent, nearly identical to Microsoft's team (91.5 percent), and well above the mid-80s percentage that was the total average of all participants.

### **Apex PR - Reto 2.0** (2011)

# Developer

- Developed enterar.me, an online application that gathered recent news stories from endi.com, ordered them
  according to their popularity, and extracted related comments from Twitter and Facebook.
- It was the winning entry in Apex PR's Reto 2.0 online mash-up application competition.
- Was in charge of Facebook and Twitter integration, using online tools to extract keywords from news items
  and then use the Twitter and Facebook API's to search for relevant comments using these keywords.

## Undergraduate research (2008-2009)

#### $Research\ assistant$

- Collaborated with Professor Marko Schütz on the developement of a software metrics system for the NetBSD operating system.
- Succeeded in integrating software metric tools with the NetBSD build process.
- Wrote research paper on the subject.

### Honors and Awards

- Completed Stanford's Introduction to Databases, an online course.
- Completed MIT 6.002x Circuits and Electronics, an online course.
- Our team placed 8th (out of hundreds) in our region in the IEEEXtreme 2011 global programming competition.
- MCSD: Web Apps Certified.

#### SKILLS

- Proficiency in software development in Python, C, C++, C#, Haskell, Java, Octave, Assembly IA-32, HTML5, CSS3, JavaScript, SQL.
- Experienced in version control systems such as Mercurial, Git, and Microsoft's Team Foundation Server.
- Familiarity with UNIX, GNU/Linux, and Amazon WC3 cloud services.

#### Extracurricular

- Co-founder of Free Culture @ UPRM, organized and collaborated on presentations, projects, and workshops.
- Co-founder of ACM-CS, was Treasurer, organized and started fundraisers, and collaborated on software projects.
- Studied abroad at Yonsei University, Seoul, South Korea (February 2010-June 2010)