

# Christian A. Rodriguez

CODE2040 Fellow & Software Developer

## contact

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## languages, frameworks & tools

Python, Django, Flask  
HTML, CSS, JS  
Ruby, SQL, PHP  
C / C++  
Git, LaTeX  
Sage, Matlab  
...and growing

## relevant coursework

### Computer Science:

Data Structures  
Algorithms  
Databases  
Programming Languages  
Operating Systems  
Machine Learning

### Mathematics:

Linear Algebra  
Discrete Mathematics  
Abstract Algebra  
Differential Equations

## education

2011–Now **Computer Science and Mathematics B.S.** University of Puerto Rico, Rio Piedras  
Major GPA: **4.0**, GPA: **3.9** Graduation Date: **May 2016**

## technical experience

- Developed Open Source Clients to interact with the Cloud Elements API. (Ruby, Python)
- Lead Web Developer for Just Maid 4 You. [startup]
- Extended an Open Source Django extension for utilizing PostgreSQL array fields. (Django)
- Developed a web-hook to automatically backup Github repo's to Drive / Dropbox. (Ruby)
- Tracking system for archiving data on power outages in Puerto Rico. (Flask)
- Developed a Web Application for University Students to easily buy/sell books. (Django)
- Designed & developed a Search Engine for movies as a class project. (C++)

## research experience

2011–2014 **Emmy Noether Lab** University of Puerto Rico, Rio Piedras  
Research student collaborating with Dr. Ivelisse Rubio  
Ongoing Work: Generating Permutation Trinomials over Finite Fields

- Characterized value set of a class of trinomials.
- Provided a construction to provide permutation polynomials.

Sum 2013 **TRUST REU Program** University of California, Berkeley  
Research intern under Daniel Aranki & Dr. Ruzena Bajcsy  
Improved a Machine Learning framework to learn Weighted Distance Functions.  
Project selected to be presented at the TRUST Autumn Conference.

Sum 2012 **SUAMI REU Program** Carnegie Mellon University  
Summer intern under supervision of Dr. Gregory Johnson  
Studied a Generalization of Mersenne Primes.  
Proved a theorem for primality tests & implemented a primality testing algorithm

## recent activities & awards

- CODE2040 2014 Fellow at Code for America. (2014)
- Won Staff Choice award in HackPR Spring 2014 Hackathon. (2014)
- Presented Research Poster at the Joint Mathematics Meetings. (2014)
- President of the University of Puerto Rico, Rio Piedras, ACM Student Chapter. (Winter 2013)
- Selected as one of the first participants of the Codetrotters Fellowship Program. (Winter 2013)
- Presented Research Posters at the SACNAS National Conference. (2012, 2013)
- Participated in LinkedIn Intern Hackathon. (2013)
- Participated in Puerto Rico Tech Summit Hackathon. (2013)
- Won best application award at Hackathon at Univ. Metropolitana. (2013)