# Rafael Lizarralde

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#### **EXPERIENCE**

## **UMass Amherst,** Amherst, MA — Research Assistant

FEBRUARY 2016 - MAY 2017

Developing collaboration, authoring, and adaptive learning systems for the MathSpring online K-12 math tutoring system.

## **Cornell University,** Ithaca, NY — Research Assistant

JUNE 2011 - OCTOBER 2013

Worked on genetic engineering for Rapidapter project (plasmid-based targeted mutagenesis in E. coli), in Dr. John March's Metabolic and Signal Engineering Laboratory.

## **Sol Genomics Network,** Ithaca, NY— *Programming Intern*

**JUNE 2009 - AUGUST 2009** 

Improved genomics analysis web tools, working with Perl and Debian.

#### **EDUCATION**

## **UMass Amherst**, Amherst, MA — Computer Science MS/PhD

SEPTEMBER 2015 - CURRENT

Favorite courses: Advanced Algorithms, Machine Learning, Probabilistic Graphical Models.

## **Cornell University,** Ithaca, NY — Biological Engineering B.Sc.

AUGUST 2010 - MAY 2013

Favorite courses: Algorithm Analysis, Computational Linguistics, Computer-Aided Engineering, Discrete Structures, Differential Equations, Uncertainty Analysis in Engineering.

#### **PROJECTS**

## **Visual Vote Counter** — Entrepreneurs' Organization "Shark Swim" Event

JUNE 2014

Wrote a Java program to count votes (cast with colored flags) in an auditorium, by analyzing pictures taken from the stage.

## **International Genetically Engineered Machines (iGEM)** — 3D Animator and Project Leader

FEBRUARY 2012 - OCTOBER 2013

Developed 3D animation for 2012 project presentation, recruited, restructured, and led team in 2013.

#### **SKILLS**

Algorithms

Machine learning

Java, Lua, Python, Perl

Copy editing

#### **AWARDS**

Best Human Practices Advance (iGEM 2013)

Top 16 (iGEM 2012)

Best Human Practices, Best Wiki, Finalist (iGEM Americas East 2012)

Cornell University
Dean's List
(Fall 2010 - Fall 2011,
Fall 2012 - Spring 2013)

#### **LANGUAGES**

**English, Spanish** 

#### **FAVORITE COURSES**

**Robot Soccer** 

**Deep Learning** 

**Machine Learning** 

**Algorithms** 

Natural Language Processing