

# IVAN ECHEVARRIA

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iechevarria.github.io

## — education —

College of William & Mary, Williamsburg, VA

*B.S. Computer Science*

*B.S. Applied Mathematics, Statistics concentration*

Dean's List

James Monroe Scholar

anticipated graduation: May 2018

GPA 3.79

Fall 2014 - present

August 2014 - present

## — skills, qualifications, courses —

*programming languages:* Python, C/C++, Java, R, Matlab

*tools and software:* LaTeX, Git, Subversion, Office Suite, Lightroom, Illustrator

*web:* HTML5, CSS3, JavaScript

*relevant courses:* Software Development (Java), Program Languages (Python, C/C++), Computer Organization (C, Assembly), Algorithms (C++), Data Structures (Python), Data Analysis (R), Big Data Analytics (R), Probability (R)

## — experience —

William and Mary, Williamsburg, VA

*Research Assistant*

June 2015 – present

- Used machine learning to classify 50,000+ images of eyes as healthy or sick
- Currently implementing state-of-the-art image segmentation algorithm
- Tools used include Python, Matlab, R, Bash, OpenCV, and LaTeX

AidData, Williamsburg, VA

*Data Team Research Associate*

May 2016 – August 2016

- Saved organization \$150k+ by scraping and classifying 2M+ articles
- Improved web scraper to pull articles from aggregation service more than 5x faster
- Tools used include Python, R, Selenium, OpenRefine, HTML5, CSS3, and JavaScript

*Uncertainty Team Research Associate*

March 2016 – May 2016

- Collaborated with 3 other researchers to estimate measurement error in aid-related geospatial data
- Tools used include Python and R

Miracle Shred, San Mateo, CA

*Hard Drive Dismantler*

June 2013 – July 2013

- Disassembled hard drives and destroyed their platters to keep client information safe

## — selected projects —

**Guac** - online interface for scraping and classifying text data

- Won cash funding in AidData's Shark Tank; was one of only 5 winning teams out of a field of 14 competitors
- Wrote frontend, collaborated with other 2 team members to write backend

**Raytracer** - 3D renderer

- Class project to write a 3D renderer with lighting in C++

**Demosaic** - library of image demosaicing algorithms

- Implemented demosaicing algorithms for the Bayer CFA in the pursuit of a superior Fujifilm X-Trans demosaicing algorithm

## — activities —

PME (Math Honor Society) – Member

July 2015 – present

- Presented on practical machine learning applications

Makerspace – Member

September 2015 – present

- Dismantle and repair cameras

Students for University Advancement – Member

August 2016 – present

- Nominated for this invitation-only organization by Mike Tierney, director of ITPIR
- Represent W&M students and interact with alumni at advancement events

