Ivan Echevarria

iechevarria@email.wm.edu  
[echevarria.io](http://www.echevarria.io)

(650) 522 8913

**Education & Honors**

William & Mary August 2014 *–* May 2018

*Major: Computer Science* GPA 3.85

*Minor: Applied Mathematics*

Phi Beta Kappa:  *Awarded to top 7% of graduating seniors* Spring 2018

Bob & Debbie Noonan Award: *Awarded to 2 seniors for excellence in interdisciplinary CS applications*  Spring 2018

2nd Place at HackU6:  *$5000 prize awarded by Dominion Enterprises at their annual hackathon*  Spring 2018

James Monroe Scholar: *Awarded to top 10% of incoming freshmen* August 2014

**Skills & Coursework**

Languages: Python, Go, JavaScript, HTML/CSS, C++, Java, SQL

Tools & Software: Git, Linux, Android, LaTeX, Google Analytics

Relevant Coursework: Software Engineering (Java), Computer Graphics (C++), Algorithms (C++), Game Design (C++),

Computer Organization (C), Data Structures (Python), Data Analysis (R), Probability (R)

**Experience**

**CarMax** *– Strategy Analyst Intern* June 2017 *–* August 2017

• Boosted CarMax’s profit by an estimated $6 million - 12 million per year by combining disparate data sources and developing a   
 machine learning solution to reduce error in car prices

• Collaborated with three senior pricing analysts to validate solution; findings deemed sound enough to move to production

• Technologies: Python (pandas, scikit-learn, matplotlib), SQL, MongoDB

**AidData***–* *Data Research Associate* April 2016 *–* August 2016

• Saved AidData $150,000+ by automating preliminary analysis on more than 2 million documents

• Collected relevant articles 5x faster by rewriting a preexisting web scraper and optimizing external API requests

• Technologies: Python (pandas, scikit-learn), R, Selenium, Ja­vaScript

**William and Mary Department of Mathematics** *–* *Research Assistant* June 2015 *–* July 2015

• Used machine learning and image processing to classify disease progression in 80 GB of images of retinas

• Accelerated image processing 20x by rewriting scripts to run on SciClone, William & Mary’s supercomputer cluster

• Technologies: Python (scikit-image, OpenCV, matplotlib), MATLAB, R, Bash

**Selected Projects** (more at [echevarria.io](http://echevarria.io))

**Reply Only** *–* *collaborative photo sharing platform* Summer 2018 – Present

• Validated idea for the product by researching competition and talking to photography students and faculty at William & Mary

• Built and tested RESTful API with user authentication and search using Go and MySQL; composed frontend with Vue.js

**Ray Tracer JS** *–* *3D ray tracer renderer* Spring 2018

• Built a 3D ray tracer renderer with shadows, reflection, custom materials, and custom lights using JavaScript, HTML/CSS

• Wrote and tested core classes for vector math operations; implemented optional supersampling for superior render quality

**Extracurriculars**

**William & Mary Photography Program** *–* *Lab Assistant, Student* August 2016 *–*May 2018

• Work featured by SUBJECTIVELY OBJECTIVE, Float Photo Magazine, PDN Edu, and other publications

• Granted funding by William & Mary complete medium format film photography project

• Assist with creating hundreds of platinum-palladium prints for artist Eliot Dudik’s monograph *COUNTRY MADE OF DIRT*