# Ivan Echevarria

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## — Education & Awards –

William & Mary Graduated May 2018

Major: Computer Science Minor: Applied Mathematics GPA 3.85

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

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

Spring 2018

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)

## **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