Ivan Echevarria

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(650) 753 9351

**Education**

The College of William & Mary expected graduation May 2018

*B.S. Computer Science* GPA 3.84

*B.S. Applied Mathematics, Probability & Statistics concentration*

Dean’s List Fall 2014 – present

James Monroe Scholar August 2014 – present

*Awarded to top 10% of William & Mary students*

**Skills & Coursework**

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

*Libraries:*  pandas, scikit-learn, matplotlib, SFML, OpenCV, scikit-image  
*Tools and Software*: Git, Linux, LaTeX, ArcMap, Maya, Adobe CC Photo, Capture One

*Relevant Courses*: Data Analysis (R), Big Data Analytics (R), Probability (R), Software Engineering (Java),

Game Design (C++), Software Development (Java), Algorithms (C++), Program Languages (C++),

Computer Graphics (C++), Remote Sensing (ArcMap), Applied Statistics, Linear Algebra

*Areas of Expertise*: data science, software engineering, machine learning, data visualization, technical writing, imaging

**Work Experience**

**CarMax**

*Strategy Analyst Intern* June 2017 – August 2017

▪ Discovered and executed on a $6 million - $12 million opportunity for better pricing by building a machine learning solution   
 that leveraged third-party data to reduce error in car prices

▪ Collaborated with pricing analysts to validate solution; findings deemed sound enough to move to production

▪ Analyzed 300 million records and identified inventory segments that were systematically underpriced

▪ Designed visualizations to demonstrate trends and to build intuition about suboptimally-priced cars

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

**AidData**

*Data Research Associate* April 2016 – August 2016

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

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

▪ Wrote documentation for newly-developed tools and improved documentation on existing software

▪ 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 80 GB of images of retinas as healthy or sick under Dr. Daniel Vasiliu

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

▪ Presented findings at a program-wide meeting; designed visualizations and built slide deck

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

**Extracurriculars**

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

▪ Achieved more than 2 million views of photographs on [Flickr](https://www.flickr.com/people/ivan-echevarria/); have work featured in print and online publications

▪ Granted funding from the Roy R. Charles Center for Academic Excellence to complete film photography project

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

**Pi Mu Epsilon (Math Honor Society)** – *Member* July 2015 – present

▪ Presented on practical machine learning applications