Miguel Bautista

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EDUCATION

University of California, Irvine June 2017
Biomedical Engineering (B.S.), Statistics (Minor)
GPA 3.33 – Dean's Honor List, 9 quarters

General Assembly – Data Science September 2017
General Assembly's Data Science program teaches students data science skills and insights on data analysis, data modeling, and its applications in the real world. The course is broken down into three units: Research Design & Exploratory Data Analysis, Foundations of Data Modeling, and Data Science in the Real World. Through GA, I gained valuable knowledge of libraries such as pandas, seaborn, scikit-learn as well as approaches to creating a proper exploratory data analysis and method to evaluate model performance.

PROFESSIONAL EXPERIENCE

Undergraduate Researcher April 2016 – June 2017
Adviser: Dr. Michael Lee

- Used MATLAB to analyze and plot play-by-play data regarding NBA games to find trends
- Visualized and clustered similarity of players based off box score measures
- Investigated the idea of momentum going into the half in an NBA game
- Investigated the distribution of league shot type on a minute-by-minute basis
- Investigated the proportions of individual teams' scoring on a minute-by-minute basis
- Investigated made shot distribution for individual teams on a quarterly basis

Machinima, Inc. December 2011 – August 2016
YouTube Partner

- Founded an online channel providing videos for viewers to learn tips & tricks on first-person shooter video games
- Generated a thousand views per video, accumulated over 2 million total video views
- Created inviting video thumbnails with Photoshop to appeal to a variety of audiences
- Used non-linear video editing software such as Final Cut Pro or Sony Vegas in order to compile gameplay highlights

UC Irvine Campus Recreation October 2015 – May 2016
Sports Writer

- Developed ideas and material for articles by analyzing and interpreting club sport trends
- Researched and investigated the latest topics in collegiate club sports
- Wrote feature articles on several sports clubs and figures by conducting interviews with many club leaders
- Composed news articles that summarize events and/or provide insight into club organizations to be published at the Campus Recreation website

PROJECTS

Blood-flow Sensing Endoscope (ELSI) September 2016 – June 2017

- Creating a low-cost device called an ELSI – endoscopic laser speckle imager
- ELSI is an endoscope enhancement to allow visualization and real-time monitoring of blood flow
- ELSI allows clinicians to detect post-surgical leaks after esophageal surgeries
- Winner of 2016 BioAccel Concept Pitch (Prize: $2,000)
    - Responsible for aesthetics for presentation and video submission

SKILLS

Proficient with: Python, MATLAB, Final Cut Pro, Sony Vegas, Microsoft Office
Working experience with: Solidworks, R, LabVIEW, Photoshop