Brian Valcarcel

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Education

University of Maryland

College Park, MD

B.S. Candidate in Computer Engineering

Expected Graduation Date: May 2020

• GPA: 3.93/4.00

• Enrolled in the Gemstone Honors Program

- Relevant Coursework: Objected Oriented Programming I-II, Introduction to Computer Systems, Discrete Structures, Elements of Discrete Signal Analysis, Digital Logic Design, Gemstone
- Spring 2018 Coursework: Algorithms, Organization of Programming Languages, Differential Equations, Linear Algebra

Experience & Projects

Research Assistant College Park, MD

University of Maryland Department of Mechanical Engineering

Fall 2017—

• Created a model for mechanical bearing failure under load in Python using data from the FEMTO-ST Institute using machine learning algorithms.

Team Clerk College Park, MD

Gemstone Honors Program: Team PROCESS

Spring 2017—

• Submitted a project sheet that was approved by University faculty and the Gemstone Honors Program for a graduate-level sports analytics research project that is currently in progress.

Programming Team Lead

College Park, MD

Introduction to Engineering Design Final Project

Spring 2017

- As part of a design team, oversaw the development of autonomous drive code for an over sand vehicle that made use of an Arduino microcontroller and RF communications technology.
- Created a movement algorithm for the over sand vehicle, and implemented the code on the device.
- Assisted in the development of the final design report, as well as finish all of the objectives and bonus objectives.

Finance Intern College Park, MD

Gift to Uplift, Inc.

Fall 2016

• Created a system of organization in Microsoft Excel for the organization's finances and helped complete taxation forms to faciliate their transition to becoming a 501(c) nonprofit organization.

Skills

- Languages: Java, Python, C
- Other Skills/Programs: Arduino, MATLAB, Microsoft Office, LATEX
- Operating Systems: Windows, GNU/Linux