Aaron Mark Barbosa

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EDUCATION & CREDENTIALS:

Texas A&M University | College of Engineering | College Station, ***College Station, Texas.*** (2019 - 2023)

- Pursuing a bachelor of science in Computer Engineering (EE Track)
- Current GPA: 3.742 on a 4.0 scale

Cypress Ranch Highschool, ***Cypress, Texas.*** (2013 - 2019)

- Graduated in the top 6% of the 2019 senior class with a GPA of 6.7222 on a seven-point weight scale with a class rank of 57/980.

Certifications: Certified AutoDesk Inventor User

Skills and Abilities:

- Technical Skills
  - Designed and implemented a full GUI-equipped program for analyzing material science data which required over 50 hours of development time. Involved debugging, implementation of new features, and runtime analysis. Required knowledge of computer science, python coding language, signal processing, and the repurposing of code from previous projects
  - Proficient in Windows, Ubuntu Linux, Office Suit: Word, Excel, PowerPoint
- Organizational and Professional Development Skills
  - Organized and planned weekly meeting presentations for research results with project team members

Work Experience:

- TAMU Student Technician | Texas A&M, College Station, TX | August 2020 - present
  - Performed research under the college of material science and engineering for several projects managed by Dr. Kelvin Xie. Research includes applications of aspects of computer science and their effects on the analysis of materials and data sets. Part-Time work schedule set by students with weekly scheduled meetings for progress checkups and discussions.
    - Approx. 10-20 hrs. per week programming, discussing, and analyzing data/results

- TAMU Online REU Program | College Station TX | June 2020 - August 2020
  - Online Research program for undergraduate students, Worked on a research project titled "Automated Strain Analysis and Mapping Using TEM Diffraction Data" and aided in creating a program for TEM diffraction data analysis in python
    - Held weekly meetings where progress on the program was reported with professor and graduate student heading the project
    - 5-10 hrs. per week programing and conversing
    - Name on official TAMU website: https://oreu.engr.tamu.edu/students/

Activities:

- Member of 'Pony Up Mentor' Program
  - Talked to freshman students about the changes they were going through, gave advice on their high school careers, mentored ~one class of high school students
- TAMU Hack Hackathon
  - 24-hour hackathon hosted at Texas A&M University where students from all over Texas compete to solve real-world problems through coding and technology
- TIDAL TAMU
  - Machine Learning and Computer Science-based research club with lesions in machine learning and another computer science-related work
    - Currently on a project based on electron microscopy
  - 5-8 hrs. of club work per week

Awards & Honors:

- Graduated Summa Cum Laude 2019 (High school)
- Dean's Honor Award (Spring 2020 - present)

Coding Language Experience:

- Python (Fluent)
  - Current language being utilized for research
- Java (Experienced)
- C++ (Fluent)
  - Relevant Coursework: Introduction to Program Design and Concepts (CSCE 121), Data Structures and Algorithms(CSCE 221), Discrete Structures for Computing (CSCE 222)
- Verilog
  - Relevant Coursework: Electrical Circuit Theory (ECEN 214), Introduction to Digital Systems Design
  - Utilized an FPGA board to complete labs for relevant coursework