Bryan Acosta

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CLEARANCE

Access: Active Secret Security Clearance (Granted 4/13/21). Eligible to work in the U.S. without restrictions.

EDUCATION

The University of Texas at Austin - 3.18 Engineering GPA

Expected May 2023

Bachelor of Science, Computational Engineering (Aerospace Engineering Department)

South Texas College - 4.0 GPA

December 2018

Associates in Mathematics - Summa Cum Laude Honors

SKILLS & AWARDS

Technical Skills: Bash Scripts, C++, Fortran, Latex, Linux, Matlab, Python, Solidworks, <u>GitHub Repos w/ Projects</u> **Soft Skills:** Leading a Software Team, Working in a team, Teaching, Public Speaking, Event Planning, Empathetic **Certifications:** Microsoft Office Specialist Certification, Certified Tax Preparer, OSHA Certified, CPR-Certified **Awards:** GMIS STEM Scholar, HSF Scholar, UT Engineering Excellence Scholar x2, Ramshorn Scholar

WORK EXPERIENCE

Lockheed Martin - Advanced Development Programs (Skunkworks) - Software Engineering Intern

Summer 2022

- Design & Develop embedded training and simulation software for F35 in C++ and JAVA
- Use Agile methodologies to create an effective and efficient software development environment

United States Space Force - *Student Researcher*

Fall 2021

- Study to identify geo-political situations, crucial issues, & effective solutions using current & future technologies
- Research how Quantum Computing will target vulnerable cyber security of satellites; provide solutions
- Presented research to USSF Chief Scientist and team; submitted paper for publication on USSF Journal

Northrop Grumman Space - *Software Engineering Intern*

Summer 2021

- Design, Code, and Debug a program for a (classified) military satellite constellation using C++ and Bash Scripting
- Developed requirements for each Sprint/Scrum following the Agile Software Development Process, used JIRA
- Wrote and adjudicated official documentation for the DCMA (Defense Contract Management Agency)

ORGANIZATIONS

Unmanned Aerial Vehicles at Austin - *Chief Software Engineer*

Fall 2020 - Fall 2021

- Head of org's software team; plan c++/python software infrastructure, collaborate with hardware team to ensure compatibility, manage subsystem leads, lead onboarding trainings, teach software skills - C++, GitHub, Python
- Developed Python Software for UAV's Guidance, Navigation, and Controls team to complete following challenges; calculate best route to given location, detect & identify objects, pick up & deliver packages

Society of Hispanic Professional Engineers

Fall 2019 - Present

- National Convention Committee Help prepare members and organize events for SHPE Convention
- Media Committee Planned and maintained the UT-SHPE website, social media, and media
- 2019-2020 Excellence Award "for constant involvement and embodiment of leadership development"

First-year Interest Group for Aerospace Engineers – Fig Mentor

Spring 2020 - Present

• Lead 2 courses for minority freshmen for transition from h.s. to engineering by offering tutoring, mentorship, and resources. 89% of first FIG recommended I return as a mentor in anonymous survey.

TECHNICAL PROJECTS

High Performance Computing - LU Decomposition - *Individual Project*

Fall 2021

 Program written in C that performed Lower–Upper decomposition/factorization of a matrix. Program runtime needed to be under a given threshold; I had to vectorize functions & optimize code with other HPC techniques.

Computational Engineering - Pandemic Simulation - *Individual Project*

Fall 2020

• C++ program that simulates a population during a pandemic. Tracks each individual's health; whether sick, susceptible, or recovered. Kept track of vaccinations, infection, social distancing, A on project.