

# Phillip Hargrove

**Hometown:** San Antonio, Texas

**Status:** Masters Student

**Department:** Aerospace Engineering & Atmospheric, Oceanic and Space Sciences

**Undergraduate Institution and Major:** Stanford University: Aeronautics and Astronautics

**Current Activities/Hobbies:** Michigan Gospel Chorale (choir / praise team member), Society of Minority Engineers and Scientists – Graduate Component (President 2015-2016), playing piano in my spare time

**Involved with NSBE in the past?:** Yes! I first joined during high school as a part of my hometown's NSBE Jr. chapter, and I was heavily involved with my undergraduate institution's collegiate chapter as an e-board member.

**Why did you choose to attend Graduate School?:** I knew that I wanted to learn a great deal more about my field of study before working full-time, and I was not yet sure if I wanted to pursue a career in academia or one in industry.

**Research summary:** I'm not working on an actual thesis or dissertation, but I am currently working on a systems engineering research project related to cubesat mission design. The team is working to set up a spreadsheet system (based on a mission concept analysis method used at the Jet Propulsion Laboratory) for quick mission design calculations, and my role is setting up the orbital simulations that determine fuel consumption and time needed for certain orbital maneuvers.

**Career goals:** After completing my masters programs, I plan to pursue a PhD in astrodynamics / orbital mechanics. My goal after the PhD is to work as a trajectory planner / mission designer at the Jet Propulsion Laboratory (JPL).