**The University of New Mexico**

**School of Engineering**

**Electrical and Computer Engineering Department**

**ECE 535 Satellite Communications**

**Student Name: Scott Nguyen**

Section Number: 5QG

**Project Proposal**

Summer 2025

**Prof. Tarief Elshafiey**

Project Type: (software, hardware, or combined hardware/software), you must select one or more types. For instance, if your project is a combination of hardware and software, you will select hardware/software.

Software

Project idea: I will create a pork-chop plot for an Earth to Mars Mission. I will also compare that to an optimizer in Python to see if they get the same result. The result being the total delta-v needed for the transfer.

Deliverable: You will list the deliverables that will be evaluated by the Professor at the end of the semester. A well-documented code that shows the objective function and the constraints used as well as the loop for the pork chop plot. A professional final report along with a short animation will be submitted as well.