Activity 6.2: Vector Plot

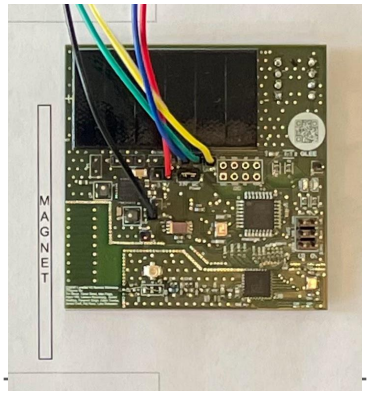
Team #3344

Task 1: Experimental Set-Up

- ☑ ~~Place the Vector Plot Template flat on the table~~
- ☑ ~~Keep the LunaSat connected to your computer~~
- ☑ ~~Keep the LunaSat as far away as possible from any electronics (including phones)~~
- ☑ ~~Keep the LunaSat away from other magnets in the kits provided~~
- ☑ ~~Verify and upload the code~~
- ☑ ~~Open the serial monitor~~

Task 2: Calibration

- ☑ ~~Orient your LunaSat so that the solar panels are at the top before calibrating~~



- ☑ ~~Calibrate the magnetometer by moving all magnets away from the LunaSat and then pressing the enter key in the serial monitor to complete the calibration~~
- ☑ ~~Place the bar magnet in its designated spot on its *edge, skinny side down*.~~
- ☑ ~~Use some tape to keep the magnet upright. *Do not lay it flat*.~~
- ☑ ~~Tape template to the table at all four corners so it doesn't move~~
- ☑ ~~Get Data! - Place the LunaSat in one of the dotted squares, making sure that the edges are aligned~~
- ☑ ~~Keep the solar panels on the top side of the LunaSat for all placements~~
- ☑ ~~Press enter to print the magnitude and direction of the vector at this position~~

Record the values from the last step for each box:

- ☑ ~~Box 1 left~~
- ☑ ~~Box 2 right~~
- ☑ ~~Box 3 left~~
- ☑ ~~Box 4 up~~
- ☑ ~~Box 5 down~~
- ☑ ~~Box 6 up~~

- ☑ ~~Draw your vector on the sheet in the appropriate direction away from the crosshair with length equal to the magnitude printed~~

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☑ ~~Repeat for each box on your paper~~

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Place your LunaSat above the point where you wish to draw a vector.
Press Enter to generate a vector.

Vector Data - Direction: Up Right , Magnitude: 2.00 cm
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