

# AccelDataCapture Documentation

*Note: The following documentation is also available upon startup of the AccelDataCapture application.*

## **View Screen**

Use the View screen to view live acceleration data from each of the devices' three axes and an overall magnitude.

The plot shows the last 10 seconds of data.

Data cannot be saved from this screen without first selecting an experiment.

## **Record Screen**

Use the Record screen to create an experiment and capture data for that experiment.

When you start recording, the experiment must not contain any data.

All three axes and magnitude will be recorded.

Leaving this screen stops any recording.

## **Graph Screen**

Use the Graph screen to view either the live or recorded data.

To view data in more detail, it is best to export your data into a spreadsheet or other tool.

## **Button Functions**

The buttons are located in horizontal ribbons by function.

Use the row beginning with Select Experiment to interact with the application's database of experiments.

Use the Save Plot button to export the current plot view to an appropriately-named file in your Pictures directory.

Use the Export Data button to export the current experiment's data to a CSV file in your Download directory; this file can be used to create graphs in spreadsheet programs.

## **Source/Credit Note**

The AccelDataCapture Android application was written by Douglas Bertelsen for the University of Nebraska-Omaha's 2013 Research Experience for Teachers program. AndroidPlot library version 0.5.2 was used for managing the graphs: [androidplot.com](http://androidplot.com). Funding for this project was supported in part by the National Science Foundation through Research Experiences for Teachers grant no. CNS 1201136. University of Nebraska at Omaha Information Science & Technology: [ist.unomaha.edu](http://ist.unomaha.edu).