

# Marshall Problem Statement / Senior Design Topic

Problem Title: \_\_\_\_\_ Labview on Raspberry Pi 3 with touchscreen and documentation \_\_\_\_\_

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Indicate which discipline/s is/are most appropriate to work on this problem, e.g., aerospace, mechanical, electrical, chemical, industrial, civil, computer, physics, materials, test, nuclear, earth science, other \_\_\_\_\_  
\_\_\_\_\_ electrical / computer

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## Marshall Problem Statement

Background: The big picture with references to previous work (Why would a senior design student be excited about this work?)

\_\_\_\_\_ No previous work. Would like to run labview applications on the popular , small , yet powerful raspberry pi single board computers.

Recent/on-going research on the problem (What resources, if any, are available to the senior design team, such as equipment, software, facility utilization)

None \_\_\_\_\_

Details of the problem; design constraints, requirements (if any), outcome expected (one semester Senior Design course lasts 15 weeks; two semester course lasts 30 weeks.) (What do you expect the senior design team to accomplish?)

Figure out if it is possible and how to load an labview application on a raspberry pi.

Figure out how to attach a touch screen to the raspberry pi and the touch screen serves as display and control of the labview application.

Do not have to create the application on raspberry pi . Can create on a PC running labview and export the application executable then get it onto the Pi and get it to run.

Complete step by stem how-to documentation so that another third party could perform the work from scratch.