

A. *ForceExperiment* was written by Jason Marshall. It was developed in support of the Integrated First-Year Curriculum in Science, Engineering, and Mathematics at Rose-Hulman Institute of Technology. This curriculum project is supported by the National Science Foundation, the General Electric Foundation, and Lilly Endowment, Inc. If you are interested in this or any other application written for the Rose-Hulman Institute of Technology Integrated First Year Curriculum, please contact us at **ifycsem@nextwork.rose-hulman.edu**. The following people are currently serving as professors for the curriculum and would welcome your comments and questions:

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- B. *ForceExperiment* best fits in the physics category.
- C. *ForceExperiment* simulates a force ring and torque rod. The ring or rod can have from two to four forces acting on them that the user must try to balance in one of two ways. First, the user can use numerical data supplied to calculate the balancing force, and then he can enter this balancing force into a text field. The second way the user can balance the forces is to use graphical

vector addition by clicking on the forces and dragging copies of them to determine the size of the balancing force. Then the user can click the balancing force on to the rod or ring by clicking with the mouse where the head of the vector should be.

- D. *ForceExperiment* is used as part of the Integrated First Year Curriculum in physics classes to demonstrate principles of forces and moments.
- E. *ForceExperiment* was developed under NeXTSTEP 2.1.
- F. *ForceExperiment* requires no special installation.

- G. The Documentation folder included with the application is required for online documentation built into the application. If it is removed, the application will still function properly, except for Help.