

# Students At Work

The Natural Sciences and Engineering Research Council of Canada (NSERC) is the national body in Canada that strategically invests in the country's scientific and technological capabilities. To stimulate student interest in research in the natural sciences and engineering, and to encourage graduate studies and research careers, NSERC offers Undergraduate Student Research Awards (USRA).

Ellen Huei-Yi, a recent graduate of the University of Toronto, won one of these awards to work at Rocscience this past summer.

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Ellen worked on a project to develop an interactive 2-D Windows program for analyzing stresses around underground excavations. The idea was that with this tool, engineers would be able to visualize stresses around excavations in real time, allowing them to gain insights into stress interactions between excavations, and identify the primary design parameters that most influence behaviour.

Ellen did an excellent job. She successfully developed a working Windows program. She gained first hand experience of the product development procedures companies such as Rocscience use to develop software that meets the wide-ranging needs of users. Ellen was exceptional in adopting and applying best practices such as consistent testing and debugging of routines and algorithms throughout the development cycle.

Beyond technical skills and ability, Ellen brought added value to our organization. We benefited from her fresh perspectives, and learned important characteristics of new graduates such as their logical thought processes, engineering perceptions, and software usage habits.

This past September, Ellen began graduate studies at the University of California (Berkeley), an institution of great national and international prestige. She is pursuing a master's degree in earthquake engineering in the department of Structural Engineering, Mechanics and Material graduate program. Ellen, we believe, will carry with her invaluable experience that will make further studies more meaningful.