

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).

Lesley-Ann Foulds, now entering her 3rd year of Civil Engineering (Environmental Collaborative Option) at the University of Toronto, won one of these awards to work at Rocscience this past summer.



As a summer student, I had the opportunity to work with Rocscience on various projects. I learned about geomechanical software, especially programs for finite element and settlement analysis, and their various applications in the industry. I assisted in updating verification files for an upcoming version of *Phase2*. I also performed tests with the next version of *Settle3D*, currently under development, which incorporates a multi-layer formulation. I created and documented verification models for both *Settle3D* and *Phase2*. These projects allowed me to explore different aspects of geomechanics and to deepen my understanding of engineering analysis with software.

During my summer work term, I gained valuable experience working in a research setting. With direction from Dr. Thamer Yacoub, I was able to significantly improve my own research and analytical skills. This helped me gain an appreciation for the different research initiatives that are ongoing at Rocscience.

I am returning to school in the fall with new perspectives and I feel that my time at Rocscience has prepared me for a very exciting future!