

Students At Work

Rocscience, Toronto, Canada



Franco Chingcuanco

During my summer internship, I worked as a research assistant to Dr. Thamer Yacoub, Geomechanics Specialist. Under his supervision, I helped develop, test and validate new features for Rocscience software. I spent significant time with the settlement analysis program, *Settle^{3D}*. I verified the program's results for Westergaard stress analysis of stratified soils. I also verified the ability of *Settle^{3D}* to model displacements due to loading of rigid footings.

Dr. Yacoub was interested in expanding the capabilities of *Slide* and *Phase²* for seepage analysis. I researched existing soil permeability models for various soil types with the aim of compiling reasonable estimates of parameter values.

I was also involved in other projects that allowed me to develop a broad spectrum of skills. These included reviewing and searching literature, surveying other geotechnical software products, and compiling lists of publications that feature Rocscience software.

My summer at Rocscience was certainly excellent for my professional development. However, it was also memorable because of the people I worked with and the work environment. I will use the skills I acquired at Rocscience to advance my ongoing research in Transportation Engineering and Planning.* - Franco Chingcuanco

* Franco is now in his 3rd year in the Department of Engineering Science at the University of Toronto. He was a winner of the Undergraduate Student Research Award (USRA), given by NSERC (The Natural Sciences and Engineering Research Council of Canada) during his summer internship.