Samuel   Earl   Andy   Rumman

Rocscience Inc. Fall Interns 2014

Rumman Rahman - During my Co-op term at Rocscience, I was involved in research with concepts regarding deep foundations under lateral loading. I developed various numerical methods for soil-pile interactions such as generation of soil response curve due to loaded piles and deflection of pile in soil structure under loading. Most of my work involved comparison and verification of results using RS3. Working under the supervision of Dr. Thamer Yacoub and alongside Dr. Kien Dang, who are experts in the field, was a great experience for me. Overall, the friendly and supportive learning environment at Rocscience provided me with the perfect co-op experience.

Andy Hoang - At my term at Rocscience, I mostly worked on implementing Examine3D file import and export in RS3, which allowed interoperability between RS3 and Examine3D. This also included some basic graphical user interface (GUI) work. This work allowed me to learn how some of the data structures studied in school are used in real world engineering applications to store and retrieve data, and how to convert that data to another form. Everyone at Rocscience was very helpful with any problems, and they were always available. I greatly enjoyed my time here at Rocscience, and would recommend working here if they want work that includes working on both the GUI and application logic.

Earl Magsipoc - During my time at Rocscience, I researched different methods for predicting driven pile axial capacity, reproduced examples based on my research, and created step-by-step procedures for each method found. This proved to be more difficult than I had anticipated. However, I enjoyed the challenge set before me and learned much from the work I completed. The environment at Rocscience is very enjoyable and always cheerful because of the wonderful people who work here. I had a wonderful time at Rocscience and found it to be a good experience in learning more about geotechnical engineering.

Samuel Enouch Cheung - My time at Rocscience has had me analyze point cloud surface reconstruction algorithms. Having investigated a variety of possible solutions, it was decided to use an implementation from the Point Cloud Library (PCL). Much of my time was spent integrating this library and its functionality, specifically the surface reconstruction techniques, into RS3 2.0. This task has been a great challenge for me and has helped to broaden my knowledge in surface reconstruction techniques and library integration between managed code and unmanaged code. My time at Rocscience has been enjoyable. The work, though challenging, has never been too taxing. My co-workers have always been available if I have ever needed help. I am grateful for the time spent here and will use the knowledge gained here moving forward.