

## **Software Donations**

The Vanderbilt EES Department has received generous support from multiple sources that have provided software for use in our classes and research. These programs greatly augment our classroom experiences, allow for cutting edge research, and give our students state-of-the-art training in industry techniques.

Petroleum Experts Limited has donated the use of MOVE <https://www.petex.com> software in the EES Department. We utilize this software in our courses and research to interpret and model structural geology. For instance, the software allows us to model the motion along a series of faults which combine to build up entire mountain ranges over millions of years. The software can utilize a wide variety of geologic data including maps, seismic reflection profiles, and well data. MOVE's capabilities greatly improve our courses as well as our research projects on the tectonic development of the Appalachians, Timor, and New Zealand. This generous donation by Petroleum Experts Limited is valued at \$2.54 million for 2020.

Schlumberger Technology Corporation has donated the use of Petrel <https://www.software.slb.com/products/petrel> software in the EES Department. This software package allows us to manipulate and interpret subsurface geologic data of all types, including seismic reflection and well data. Utilizing Petrel allows us to accurately characterize subsurface faults, folds, and sedimentary features in three dimensions. This has greatly improved active research projects in New Zealand and Bangladesh. This software will also play a key role in advanced EES courses, training students in the use of Petrel's industry standard software suite. This generous donation by Schlumberger Technology Corporation is valued at \$4.91 million for 2018-2021.

Nunns and Rogan LLC has provided free academic use of StructureSolver <https://www.structuresolver.com/> software in the EES Department. This software allows us to model the geometries of faults and folds and their development over time. In addition to our research projects, this software has been extremely useful in EES courses. The easy-to-use interface allows for rapid model creation that allows students to quickly see the development of geologic structures over time.

The EES Department is immensely thankful to each of these companies for their generous support to the teaching and research missions of Vanderbilt University. Vanderbilt students and faculty: please contact Garrett Tate (EES) and Todd Dodson (VUIT for A&S) for instructions on how to download and utilize the software.