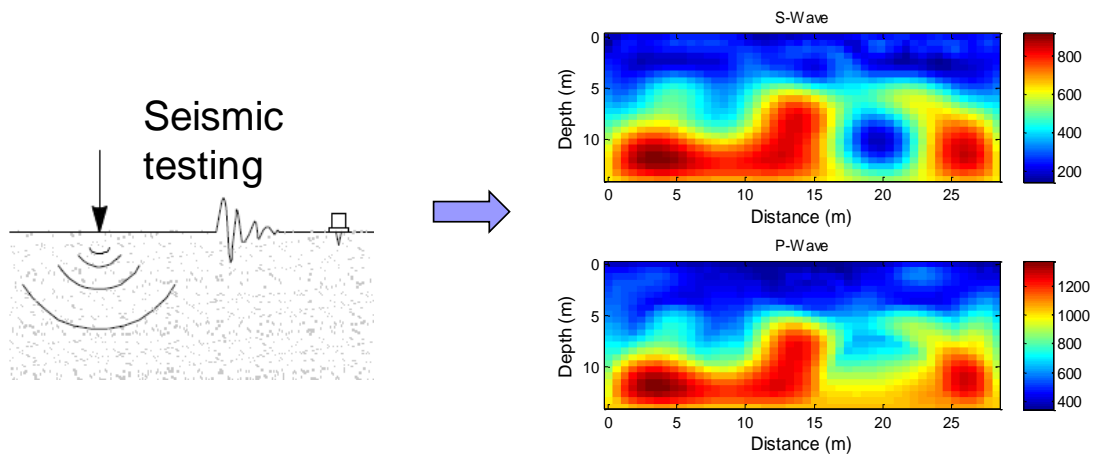


Available Ph.D. Funding in Geosystems Engineering

The Engineering School of Sustainable Infrastructure and Environment (ESSIE) at the University of Florida is pleased to announce two openings for highly motivated and highly qualified students interested in pursuing a PhD.

Seismic Waveform Tomography (Funding through NSF and Florida DOT): Site characterization for design of substructures is crucial as unanticipated site conditions represent the most significant problems during and after construction of foundations. Subsurface investigations on a site are more frequently utilizing non-destructive testing (NDT) as the initial investigation method, as NDT is faster and cheaper than most invasive tests. The goal of the current project is to develop a seismic waveform method for extraction of 3-D subsurface geologic structures at high resolution. The focus is to obtain subsurface information at meter-scales to a depth of 30 m using optimized seismic measurements on the ground surface. Two primary efforts of the work are: (1) investigate seismic sensor 2-D spatial layouts and energy source locations for cyberphysical waveform inversion models (field data collection and real-time numerical modeling) and (2) enhanced 3-D numerical waveform inversion techniques to reduce computation cost and improve subsurface spatial resolution.



Applicants must hold a bachelor/master degree (at the time of starting the position), preferably in civil or mechanical engineering. TOEFL/IELTS and GRE official scores are required. The ideal candidates should have an interest in field data collection, working with sensors, have a strong background in mathematics (national/international awards are strongly preferred), numerical modeling, and solid programming skills (Matlab, C++). Proficiency in written and spoken English is essential. The appointment will be for a maximum of four years, and competitive salary includes fringe benefits.

Interested individuals are encouraged to send a statement of interest and CV in a single pdf to Prof. Scott Wasman scott.wasman@essie.ufl.edu and Prof. Khiem Tran khiem.tran@essie.ufl.edu.

Review of CV's will begin immediately with the intention to fill the position for the Spring or Summer of 2019. Selected individuals will be need to apply to the Graduate School at the University of Florida. Details can be found here https://www.essie.ufl.edu/student_resources/admissions/graduate/.