



Master Student Position

The *Solids, Waves, Intelligence, and Mechanics* (SWIM) Lab, directed by Dr. Chanseok Jeong, at Central Michigan University (CMU), located in Mt. Pleasant, Michigan, USA, seeks applications for fully-funded master-level graduate student positions of the Mechanical Engineering major starting from Fall 2021.

The positions should conduct research in the areas of inverse modeling (i.e., system identification), wave propagation analysis (i.e., studies on acoustics and vibration), and computational mechanics (e.g., finite element method). The positions are not of a coursework-based track but of a research-intensive one so that the positions would receive significant opportunities and resources to conduct research.

Required qualification

- Bachelor's degree in a relevant discipline (mechanical engineering or civil engineering).
- Strong background and interest in programming using MATLAB, FORTRAN, C++, or Python, etc.
- Strong interest in finite element method, wave propagation, structural mechanics, and inverse modeling.
- Strong interest in high-performance computing in a Unix or Linux cluster machine.
- Ability to communicate effectively.

Preferred qualification

- Have a record of high-quality journal publications in related areas.

For more information in the positions, please refer to the following materials.

- Admission requirement ([Webpage link](#)).
- The Graduate Student Handbook in School of Engineering and Technology at CMU ([Webpage link](#)).
- The abstract of Dr. Jeong's recent National Science Foundation project ([Webpage link](#)).
- *Full-waveform inversion of incoherent dynamic traction in a bounded 2D domain of scalar wave motions*, Journal of Engineering Mechanics, ASCE (accepted and in press) ([Preprint pdf link](#)).

For more information, contact Dr. Jeong at: jeong1c@cmich.edu with an email of which subject line should be "Master Student Position". Please also attach a resume to the email.