

Dear Professors,

I am with the US Army Corps of Engineers Engineering Research and Development Center (ERDC) in Vicksburg, MS. I have an opportunity in which some of your students may be interested. I am ERDC's focus area lead for Structural Health Monitoring and am looking to grow my research team. If you would, please forward this on to other departments within your University which may have potential candidates. We are looking to hire up to six, top performing, PhD or MS level structural or mechanical engineers and up to two mathematical or statistical modelers. My team has been funded very well for a few years and we anticipate, based on recent congressional legislation, for this trend to continue for the foreseeable future. Our efforts center on providing tools and techniques to understand how inspection and sensor data can be used to assess the future performance of large civil infrastructure, particularly water resources infrastructure (locks, dams, levees, etc.). We are focused on bridging the gap between academic research and enterprise solutions that are applied for use in operational and budgetary decisions. Below is a little information on what skillsets we are seeking.

Structural or Mechanical Engineer (perhaps Aerospace):

- Structural analysis, load path, dynamics, design
- Structural mechanics, stress analysis, elastoplasticity, fatigue, fracture
- Finite element analysis
- Structural experimentation, instrumentation, planning, data processing
- Structural health monitoring, pattern recognition, sensor technology

Mathematical or Statistical Modeling:

- Machine learning, pattern recognition
- Stochastic processes
- Signal processing

Other skillsets we are interested in include system engineering and decision analysis.

Our laboratory supports the Army Corps' missions in both Civil Works and Military. We have scientists and engineers performing research in the fields of civil, structural, geotechnical, electrical, computational, environmental, hydraulic, construction, and materials engineering as well as many other areas of research physics. Our facilities are able to support full-scale structural tests, scale tests on a centrifuge, shake table testing, scale fluid-structure interaction models, explosive tests, and many others. There is tremendous opportunity for researchers to find an area of expertise and to take their ideas from concept to application. We have opportunities for students to obtain their PhDs while working on their normal research as well. We also have opportunities for students to intern over the summers. More information about our laboratory can be found here: <http://www.erd.usace.army.mil/>

If you have anyone in mind, please let them know about this opportunity. They can email me and I'll get them in touch with our recruiters. U.S. citizenship is required. Thank you for your consideration.

Best Regards,

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