

Post-doctoral research position in dynamics of geotechnical systems

We seek highly motivated, qualified individuals who are interested in joining our research group in computational dynamics of geotechnical systems, with emphasis on earthquake hazards. Our group is part of the Mechanical and Civil Engineering Department in the Division of Engineering and Applied Sciences at Caltech.

Our research cuts across the areas of geotechnical engineering, computational mechanics, structural dynamics, and strong motion seismology. Examples of research topics that successful applicants will work on include multi-scale modeling of 3D nonlinear site effects in ground motion simulations, with emphasis on ground failure; soil-structure interaction for surface and buried infrastructure systems; offshore geotechnics with emphasis on clean energy harvesting (e.g. wind and wave energy); physics-based modeling of extreme ground motions and high frequency attenuation of seismic waves; and dynamics of natural and man-made (e.g. dams) topographic features, including landslide triggering.

Applicants must have a Ph.D. degree in engineering or earth sciences, strong analytical skills, and experience in programming, data analysis, simulation and visualization. Experience with OPENSEES, LS-DYNA, FLAC 3DTM or equivalent finite element and finite difference software is encouraged. Fluency in English is mandatory. Good interpersonal skills, willingness to work in a team of several researchers and students, and ability to present the work at international conferences are expected.

Selection for the position will start immediately, and will continue until the positions are filled. To apply, please send an email to domniki@caltech.edu with title *Re: Post-doctoral position application*; and attach your CV with list of publications, a statement of research interests, and the names and addresses of at least two referees. The package should preferably be in PDF format.

For more information on the positions, please contact Prof. Domniki Asimaki (domniki@caltech.edu).