

Experience with Undergraduate Student Researchers on the City Block Project

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During the past two years, five Cal Poly civil and architectural engineering students worked as undergraduate researchers on the NSF-sponsored "City Block" project. This project involves large-scale centrifuge testing and utilizes the NEES equipment site at the University of California, Davis. The focus of the project is soil-structure interaction during earthquakes in dense urban environments. The undergraduates served as essential team members during three centrifuge tests, contributing to model construction, equipment design, instrumentation calibration, data collection, data analysis, experiment documentation, and reporting. The work assignments lasted from eight to ten weeks and occurred during all times of the year. Further, the undergraduates completed their research at three of the universities collaborating on this project and were advised and mentored primarily by graduate students. In this presentation, we discuss our strategies and experiences in recruiting, training, advising, and mentoring the undergraduate researchers. In addition, we discuss specific ways in which we assessed the students' project experiences. We provide examples of different work products prepared by the undergraduates, and we present the results of post-employment assessment surveys. Survey results indicate that the research experiences have been positive. The survey results provide valuable feedback for the graduate student leaders.

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Soil-Structure Interaction on the Scale of a City Block

Seismic Performance Assessment in Dense Urban Environments



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