

Development of computer Role-playing games for geotechnical construction

Project Number: 6000139

Principal Investigator: Dr Yu WANG

Grant Type: TDG

Abstract:

This project aims to develop computer role-playing games (CRPGs) to facilitate students in learning construction technology related to geotechnical engineering, which is a major component in the curriculums of the Building & Construction Department. In the proposed games, students assume the roles of building contractors, who are constructing some geotechnical structures, such as bored piles and retaining walls. The contractors improvise freely, and the outcomes of their actions and games are judged by the system rules and guidelines, which reflect the construction principles and requirements. The proposed games integrate the student-centered learning with entertainments and provide an alternative way to encourage active learning.