

Virtual Mine Rescue Training: NORCAT & Ontario Mine Rescue Partnership in the development of a computer-based Mine Rescue evaluation

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This paper presents the computer-based underground Mine Rescue training tool developed by the Northern Center for Advanced Technology (NORCAT) in partnership with Ontario Mine Rescue. Similar to computer based training developed in Australia and at the Colorado School of Mines, this program allows Mine Rescue responders to control digital avatars in a simulated underground mine.

In scope are the technical details of the program and the logic built to provide evaluation criteria to users. Also in scope is the pilot evaluation of the program with underground Mining Engineering undergraduate students, as well as the potential for site-specific customization and evaluation of routing and priorities of Mine Rescue responders.

The method used by the tool is a combination of emergency procedures table-top preparation, information evaluation and decision making, along with a virtual team deployment and evaluation of safe team practices and procedures from a classroom setting.

Results and a demonstration of the program will be presented at the 2017 International Mines Rescue Body (IMRB) Conference for feedback on the merits of this tool, not as a replacement for field level skills training, but as an additional evaluation technique.