Real-time Radiation Detection Simulator
For Nuclear Security Training

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Virtual Reality and Nuclear Security Training

- Detecting illicit trafficking of radioactive substances is a task for which Customs officers need to be trained for.
  - Traditional methods for radiation detection training use real radioactive sources. This is both expensive and difficult to manage.
  - Can Virtual Reality based training provide a cost effective alternative? And complement existing source-based training.

Application Structure

- 3D scenario: a standard customs area in any international border has been modelled, with a high level of detail to increase the level of realism for the user.

Procedure: the application embeds a job-specific procedure - agreed with the course instructors. The user is trained a new skill while following already existing steps in his/her own job.

Detector: the user has a First person view, to complement the detector model, a 2D interface replicates the detector’s real interface and shows real time data of the radiation dose among other data.

References


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