

Virtual Reality Cognitive Performance Assessment Test (VRCPAT)

ICT has developed an adaptive virtual environment for assessment and rehabilitation of neurocognitive and affective functioning. This project brings together a team of researchers to incorporate cutting-edge neuropsychological and physiological assessment into state of the art interactive/adaptive virtual Iraqi/Afghani scenarios.

Key Achievements of the VRCPAT Project

- Capability to assess users with the VRCPAT in order to establish baseline performance that is reflective of individual differences.
- Ability to utilize neurocognitive and psychophysiological profile data to adapt the content of the VRCPAT to user performance in real-time.
- Completed development of a neurocognitive and psychophysiological interface for performance evaluation of trainees in military-relevant virtual environments.

Facts and Figures

- VRCPAT is being used to conduct studies at Tripler Army Medical Center, Ft. Lewis, Madigan Army Medical Center, West Point, USC and UC San Diego.
- VRCPAT has been used in studies with over 400 subjects, including both Soldiers and civilians.

External Collaborators

- Kaleb McDowell, PhD (U.S. Army Research Laboratory)
- Kelvin Oie, PhD (U.S. Army Research Laboratory)
- Scott Kerick, PhD (U.S. Army Research Laboratory)
- Greg Reger (Madigan Army Medical Center)
- Mike Dawson, PhD (USC Psychology)
- Shri Narayanan, PhD (USC Viterbi)
- Kirby Gilliland, PhD (C-SHOP; ANAM)
- Robert Schlegel, PhD (C-SHOP; ANAM)