Intelligent Tutor Using Adaptive Learning to Partial Discharges with Virtual Reality Systems

Authors : Hernández Yasmín, Ochoa Alberto, Hurtado Diego

Abstract : The aim of this study is developing an intelligent tutoring system for electrical operators training with virtual reality systems at the laboratory center of partials discharges LAPEM. The electrical domain requires efficient and well trained personnel, due to the danger involved in the partials discharges field, qualified electricians are required. This paper presents an overview of the intelligent tutor adaptive learning design and user interface with VR. We propose the develop of constructing a model domain of a subset of partial discharges enables adaptive training through a trainee model which represents the affective and knowledge states of trainees. According to the success of the intelligent tutor system with VR, it is also hypothesized that the trainees will able to learn the electrical domain installations of partial discharges and gain knowledge more efficient and well trained than trainees using traditional methods of teaching without running any risk of being in danger, traditional methods makes training lengthily, costly and dangerously.