Time & Location: August 14, 2020 at 10:00 AM in Zoom
https://zoom.us/j/95739361485?pwd=TDVqUnRDN0jjYU5BbXISNXBuQ2UxUT09
Title: HUMAN PERFORMANCE IN VIRTUAL REALITY ENVIRONMENTS AND ITS EXPLORATION WITH ENGINEERING ANALYTICS

Engineering Analytics (EA) is a technique used to derive meaningful insight from gathered data. It is an approach that has arisen, and it includes the process of analyzing data using analytics tools from fields such as Big Data, Machine Learning (ML), traditional operations research, statistics, and numerical methods. Industrial Engineering is an engineering field concerned on how to design better, improve, and install integrated systems, uses EA to understand and continually improve, innovate, and build new processes. Therefore, EA and Virtual Reality (VR) technology can be used in combination with Electroencephalography (EEG), a physiological measurement, to investigate human areas. The objective of this study was to use EA, VR, and EEG to provide insights into the way we study brain attention, simulation sickness, and verbal/visual ability.

In this research study, participants were examined in 3D virtual environments by collecting subjective responses as well as recording and analyzing participants' brainwaves. EA techniques were utilized to investigate and discover relationships.

Major: Industrial Engineering

Educational Career:
Bachelor's of Industrial Engineering, BS, 2011, King Saud University, Saudi Arabia
Master's of Industrial Engineering, MS, 2015, University of Central Florida, USA

Committee in Charge:
Luis Rabelo, Chair, Department of Industrial Engineering and Management Systems, UCF
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Approved for distribution by Luis Rabelo, Committee Chair, on July 30, 2020.

The public is welcome to attend.