

Nx10 Game Behaviour Index

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Abstract

The following is an information document presenting the scientific basis for Nx10's Game Behaviour Index (G.B.I.). The document outlines the the specific Touchscreen, Accelerometer, and Gyroscope (TAG) data Nx10 intends to retrieve for inputs, and proposes methods of analysis supported by precedent in the pre-existing literature in order to correlate observable physical data to the user's affective state and extract real-time insight. The process of testing and validation of the G.B.I. is discussed as well as potential applications of G.B.I. technology in both the short-term and long-term.

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Key Terms

Altitude Angle The elevation angle between the stylus/finger and the surface of the touchscreen

ANOVA Analysis of Variance

Azimuth Angle The angle describing the orientation of the stylus/finger relative to the plane of the touchscreen

CNNs Convolutional Neural Networks

G.B.I. Game Behaviour Index

ML Machine Learning

TAG Touchscreen Accelerometer Gyroscope