

An unbeatable computer game?

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"Yeti" is the character in a new computer game that has the potential to predict a player's move in advance by measuring skin conductance. Image credit: YetiSports.

Researchers have come up with an idea to design a computer game that knows a player's move about two seconds before the move is made. Using measurements of players' skin conductance, the computer's sensors can tell when a player is about to press a button.

Laszlo Laufer and Bottyan Nemeth at the Budapest University of Technology and Economics in Hungary developed the idea of a

frustrating computer game to learn more about biofeedback signals analysis, which could have more useful applications in real life. The researchers told [*New Scientist*](#), for example, that the technology could be used to help speed up a person's reaction time, which could be beneficial for pilots in military operations.

For now, though, the computer game, called YetiSports part 8: JungleSwing, is available for anyone to play at yetisports.org (free registration is required). Although the appropriate hardware is required for biofeedback sensors, the rules of the game can still be seen: an ape-like Yeti tries to climb a tree by swinging from branch to branch. A player must click the mouse at the correct moment for Yeti to swing to the next branch; if not, Yeti falls to the ground.

Laufer and Nemeth had subjects test the game, taking measurements of the subjects' heart rates, skin conductance, and electrical activity in the brain. The scientists were surprised to find that skin conductance by itself was sufficient to predict a jump two seconds in advance.

With this information, Laufer has suggested the possibility for a “frustration game”—that is, a game that would slow down or speed up just before a jump to throw a player off. While previous research has been done on using EEG signals as a type of game control, skin conductance has the advantage of potentially being able to be built right in to future game controllers.

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