

British group unveils facial reading lie-detector

September 14 2011, by Bob Yirka

(PhysOrg.com) -- A British team of researchers led by Professor Hassan Ugail of Bradford University have demonstrated a new type of lie-detector at the annual British Science Festival in Bradford. Instead of hooking people up to wires and pressure cuffs, the new system measures heat given off around the eyes and subtle facial movements that are then analyzed using a special algorithm. Ugail claims that the, as yet unnamed system, has been shown to be around 70% accurate when testing volunteers.

The new system records subtle clues that people give off when lying, such as increased [blood flow](#) around the eyes, tiny [lip movements](#) or nose twitching. All of these bits of information are then fed into the computer which uses an algorithm based on the work of [psychologists](#) Paul Ekman and Walter Friesen, to give an educated guess as to whether the person being analyzed is lying.

One of the major selling points of such technology would be its use in situations where the person being targeted doesn't know they are being tested, something that traditional polygraph lie-detectors can't do. Because the research has been backed by the UK's Border Agency, the technology will most likely be used to screen passengers at airports, and in fact, the team is currently working with government and security officials to begin testing at an unspecified UK airport in the near future.

Because the tests were done with volunteers who not only knew they were being tested, but were asked to lie when answering mundane

questions, Ugail believes the system will prove to be far more accurate when used in real life situations. But he also believes that as more research is done and more variables are added to the [algorithm](#), that the system will one day prove to be as reliable as current lie-detectors, which experts believe are about 90% accurate.

Ugail also acknowledges that no [lie-detector](#) can be 100% accurate as none of them actually detect lying; instead they rely on cues to make educated guesses. Though he adds that the more tools law enforcement has at its disposal, the better chance they will have of catching those with ill intent.

If the new system proves to be as reliable as Ugail hopes, it might make us all safer, but it might also lead to other less noble purposes, such as employers using it in job interviews or by news people in real-time interviews, which some might construe as an invasion of privacy.

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