

Oxygen-Monitoring Glasses Could Let You Read People's Moods Right Through Their Skin

By Clay Dillow Posted 06.19.2012 at 11:51 am



O2Amps via Changizi Blog

The ability to read other people is largely perceived to be intuitive--some people just have a talent for "seeing" what other people are thinking or feeling. But what if you could augment yourself with such an ability, allowing you to perceive changes in other people's biologies as their biochemical state changes? A company called 2AI Labs has developed a pair of glasses--known as O2Amps--that supposedly can do just that.

The glasses are so named because they rely on oxygen levels in the blood beneath the skin to extrapolate social signals from a person. The technology is based on the bio-evolutionary fact that color vision in primates--at least according to some research--developed to reveal fluctuations in blood-oxygen levels and to allow animals to take behavioral or social cues from those changes.

Humans have long since ceased consciously perceiving these subtle social signals, but they're still there and with the right technology we can strengthen them. "Once one understands the connection between our color vision and blood physiology, it's possible to build filters that further amplify our perception of the blood and the signals it provides," researcher and 2AI Labs Director of Human Cognition Mark Changizi wrote in a blog post yesterday, a post that also announced the arrival of the first batch of O2Amps.

Changizi sees huge potential for his glasses in the mass market, but in particular he sees lots of room to apply them in specific fields like medicine, security, and gaming. O2Amps are reportedly already in testing at two hospitals, where the lenses make a patient's veins appear to glow, revealing the vasculature beneath the skin. The glasses could also help medical personnel detect trauma via hemoglobin concentrations beneath the skin--simply by looking a patient over a nurse or doctor could quickly see where trauma has occurred and where it is heaviest.

Then there are applications in security--imagine airport security personnel that can see the nervousness on a suspicious person's face--or even in sports (a pitcher's blood-oxygen profile might tip his pitches, for instance). But the larger application is in our everyday social lives. Changizi seems to envision a day when your everyday glasses pack 2AI's technology. Meaning everything from business lunches to first dates to interactions with one's spouse could be colored by social cues imparted by their physiologies. Consider your poker face useless.

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10 COMMENTS

purfus

06/19/12 at 1:09 pm

I wonder what Ron Jeremy looks like through these.

[Link to this comment](#)



Robot

06/19/12 at 1:30 pm

Seems this is a gimmick for a lot of people to sit back and judge other people are lying, without knowing the medical back ground of that person, which may give off false readings. I also suspect a pathological liar would naturally fool these glasses and in fact, those kinds of people we should be most worried about.

Lying is instinctive from human and it is our social up bringing that teaches us that it is wrong to lie. Generally speaking people lie for 2 reasons, respectively. The first reason a person lies to get out of trouble. The second reason a person lies to gain something.

Lying persist mainly, since is so easily done and we humans have not master the ability to read minds and truly prove factually, when a person is lying to our face. It is usually other facts to the situation that removes the disguises of the face of the liar and reveals the truth of the situation.

One of the simplest methods to stop lying and use of lying to manipulate others, is open communication among all those around you. Liars like to stay hidden and to be secretive. Free speech and open communication disarms the liar.

[Link to this comment](#)



aware_one

06/19/12 at 1:45 pm

Hey Robot, you have lots of good insight into a vast number of topics discussed here on PopSci. I am starting a website where I hope to have a handful of contributors submit articles on whatever topics the writer finds of interest. I don't know if writing articles are your bag but if you would like an outlet to promote yourself, your ideas or your own web niche please get in touch and I would like to tell you a bit more. The project is called "The Space Academy" and I intend to use this website/platform to enlighten people on topics ranging from astronomy to design, and from robotics to chemistry (much like PopSci but with a more independent / grass roots vibe). The website and its concepts are still in a developmental state, but over the next few weeks I hope to have my website working fully functionally and have a number of daily article submissions from writers. Reach me at wes@thespaceacademy.ca if you would like to know more about this project. Cheers!

[Link to this comment](#)



rib2

06/19/12 at 2:43 pm

So that is what he was wearing when he busted me out of a poker tournament? My dark glasses didn't hide my emotions, where can I get a pair?

Ron Bennett

[Link to this comment](#)



Robot

06/19/12 at 3:16 pm

aware_one,
I am just an opinion. I do not promote myself. I wish more others would make and share their own opinions. I feel many are shy to comment on PoPSci for fear of being ridiculed. The point of science is not for science sake, itself. Science exist to reflect upon humanity and it's with people choices and voices we choose how to use it.

[Link to this comment](#)



Robot

06/19/12 at 3:58 pm

aware_one,
At first glance, a new jerk response might appear I comment often and are self promoting. If you calculate in the large quantity of readers and of those that do not comment, my few words are miniscule by comparison. If a fair amount of more people would comment, my few comments would just fade in the back ground. Oh, I am anonymous and you and others, so I cannot promote myself, too.

If anything, I often suffer negative comments of those against my own opinions. I am very much aware of my own thoughts and often bored. I am often educated by those who comments to me, good and bad; entertained too. :)

I enjoy and adore PoPSci magazine and this blog articles, plus all the

people who comment! It so very much enjoyable!

[Link to this comment](#)



Robot

06/19/12 at 3:59 pm

I enjoy reading Ron Bennetts comments often!

[Link to this comment](#)



tindaddy

06/19/12 at 7:39 pm

Do not freak when you see TSA wearing these.

Be as docile as possible during your traveling experience.

For gods sake, don't be high.

These things will make life wonderfully subdued, an instant minority report to have trouble whisked away before the commotion happens, all the trendiest cameras will have them . Property values will skyrocket in "phlox" neighborhoods.

Oh, wait, it's a medical invention. I'm sure it won't find it's way to our totally rational officers for use in profiling, I'm sorry. ; , ;)

[Link to this comment](#)



Robot

06/19/12 at 8:40 pm

Yea, sure, I am looking at the world with ROSE colored lens and I can tell who is lying, ROFL.... snort... now that is funny, ... ha ha ha.. thank you... snort..

[Link to this comment](#)



Brian

P.

06/20/12 at 11:37 am

I would think that even the most novice liar could fool someone wearing these glasses with the right type of drugs in their system.

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