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# Emex

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Humans are incredible. The human brain is the triumph of billions of years of evolution. The abilities we have inherited are nothing short of extraordinary. However, we aren't perfect. We have many shortfalls. A disturbing weakness of the human mind lies in its ability to recall memories. We see, hear, and experience thousands of pieces of information every day. Much of this data is processed and stored by our brain. However, so much of it is never seen again because many memories are too weak for us to later recall. This is a problem. Humans have highly developed memory storage capabilities, yet our poor recall stops us from using our brains to their full potential.

I believe that technology is not only a tool, but an extension of ourselves. I see the potential of technology to circumvent human weaknesses. I believe in the application of Humanistic Intelligence[1], such that our technologies become such a core part of the human system that we enhance or even replace inferior human abilities. This is the purpose of the Emex. The Emex is a virtual memory device, a wearable technology that embodies the core principles of Humanistic Intelligence. The Emex, when worn by the user, records video and audio input. These sources of information are processed and stored as a digital, virtual memories in a structure that resembles that of the human brain. Within this architecture, each new experience is connected to other virtual memories by analyzing patterns that new information shares with old information. In essence, this technology will align sensory input into a coherent structure, just as our biological memory works.

Once memories are stored in a Emex, they are then able to be expanded (grown) and searched (remembered). Emex does all of these things live, on the go, in a wearable form factor. Have you ever smelled something that instantly brings back a flood of memories from childhood? This is an example of a small external input that triggers internal recall of a large number of memories. This is exactly the strategy of Emex, using short bursts of external audio information via headphones to instantly flood your brain with all of the internal information that you need. Instead of reminding you of every detail of a memory when you are in need, Emex supplies you (either through visual or auditory output) with just a tidbit of information. Just enough information to serve as a trigger for your built in, biological recall to trigger. Instead of taking time to teach you new things (we have Google for that), Emex solves problems instantaneously by pulling up solutions that you already know.

A couple of examples (it will do much more):

- Forgot the name of the executive you met last month at a networking event? Immediate name recall is triggered through facial recognition.
- Had a conversation you didn't get to finish with a friend? Get instant flashback to where your last conversation was cut short.
- Having a hard time understanding a lecture? Relisten, read the transcript, or even pull up a quick summary after the class.
- Read a great argument that you want to bring up in your current debate? Instantly search through a corpus of every book you have ever read.
- Lost your wallet? Retrace your steps throughout the day on a map, see a list of all the stores you were in, or search through pictures and video from the day to see when you last had it.
- Want to tell your buddy a story next time you see him? Set a human timer, and receive a reminder about the story the next time you see your friend.

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## References

1. Marvin Minsky, Ray Kurzweil, Steve Mann (2013). "The Society of Intelligent Veillance", Proceedings of the IEEE ISTAS 2013, Toronto, Ontario, Canada, pp13-17.