

# Humans modeled as computers

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## 1 Question

What do humans modeled as computers look like?

## 2 Answer

- Numerous processes all running in parallel in different regions of the body and the brain (heartbeat, breathing, sight, smell, taste).
- The brain runs multiple processes at once, each processing a different modal input (sight, taste, touch, hearing, smell).
- Those processes are buffered and a process takes care of synchronizing the different input streams to create a coherent flow of information.
- The spinal cord and nerves are network cables, transferring information from the limbs and other regions of the body to the main processing unit, the brain.
- The eyes are digital cameras that can see into the world, converting photons into bits of data.
- The ears are microphones that can listen to a limited range of frequencies (20-20000 Hz).
- The mouth act as a speaker to emit sound for others to perceive
- Touch is complex as it deals with textures, temperatures, moisture and pressures, however it can likely be modeled as a surface with discrete elements that measure a few things such as the force currently applied on it, the temperature, moisture.
- Taste and smell are also complex as they are specialized receptors that will perceive different fragrances based on the distribution of particles that are perceived and that can be recognized.
- The arms, legs, hands, feet are actuators used to interact with the environment.
- The stomach and intestine are the power supply.
- Neurons throughout the body act as distributed memory and storage, as well as processing units.
- Blood is used as a mechanism to transfer energy between components. It also acts as a heatsink for the brain.

## 3 References

- [Deconstruction of a mind](#)
- [Humans as machines](#)
- [Senses](#)
- [The brain](#)