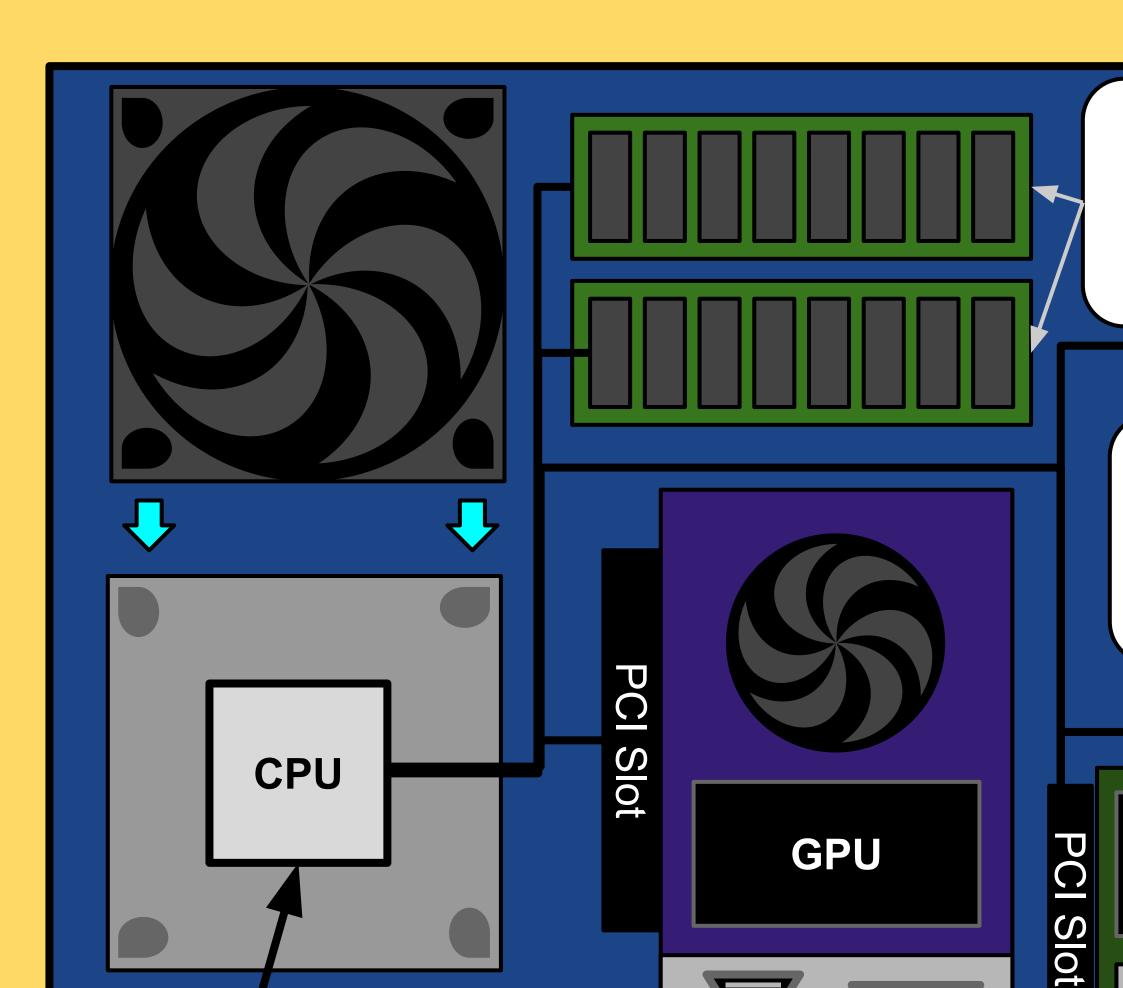
Hardware in a Computer

Computers exist in all kinds of devices these days, from servers and personal computers, to mobile phones, to appliances. Let's take a look at the parts that make up a typical computer. While this diagram is based on a typical desktop computer, most kinds of computers will have a similar set of components.



RAM

Random Access Memory stores data in-use by the CPU (including program instructions and state).

Motherboard

The large circuit board that hosts most components of the computer.

NIC

Hard Drive

Persistent storage of files.
Unlike RAM, data stored
here will not be lost when
the computer restarts.



CPU

The Central Processing
Unit performs the
computations to execute
computer programs. The
CPU is covered by a large
fan to prevent it from
overheating.

Graphics Card

Houses ports to connect to monitors/screens, and. a specialised processor (the Graphics Processing Unit) for computations related to graphics. The GPU is used for 3D video games, and other applications like machine learning.

Network Card

Handles network connectivity (e.g. to the Internet) via a network cable and/or WiFi.

PCI Slots

Peripheral Component Interface slots connect "expansion cards" to the motherboard.

I/O Ports

Ports for connecting to peripheral input/output devices. E.g. mouse, keyboard, speakers, printer.

Power Supply

The Power Supply Unit receives power from a wall socket, and supplies power to all components within the computer

