

Fundamentals of Computer Technology

Optional Assignment

Groups of **two persons** can write a report about one of the following topics:

1. Computer performance. Ways to evaluate performance. Benchmarks.
2. PC processor. Choose one of the newest processors (INTEL, AMD, IBM...) and study its characteristics (architecture, instruction set, technology, performance, energy consumption...). Identify Von Neuman architecture units.
3. Smart phones processors. Comparative with PC processors (architecture, instruction set, technology, performance, energy consumption...). Identify Von Neuman architecture units.
4. Supercomputing.
5. *Big Data*.
6. Photonic/optical computing.
7. Quantum computing.
8. Biological computing.
9. Neural computing.
10. Graphene in computing
11. Blockchain technology
12. Artificial Intelligence
13. For any other topic related to computation ask alvaro.perales@uah.es

The assignment will be delivered on **Tuesday, November 9th, in class**, in the following two formats:

- One **printed** document per group (6 sides maximum).
- A **video** with a presentation of 8 minutes maximum in which all the members of the group participate. The video must be delivered on a CD/pendrive in the class itself or as a LINK (dropbox etc... do not send the file directly!!) to alvaro.perales@uah.es with the same deadline.

This assignment is **optional** and will constitute a maximum of **2 points** in the final grade.

Detection of **copy/paste** from the internet or books will cause **failing continuous evaluation** (then final exam in July).