

# Fundamentals of Computer Technology

## Optional Assignment

**Groups of two persons** can write a report about one of the following topics (for any other one ask the lecturer):

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 functional units.
3. Smart phones processors. Comparative with PC processors (architecture, instruction set, technology, performance, energy consumption...)
4. Supercomputing.
5. *Big Data*.
6. Photonic/optical computing.
7. Quantum computing.
8. Biological computing.
9. Neural computing.
10. Graphene in future computing
11. Blockchain technology
12. Artificial Intelligence

A **document** (6 sheets maximum) must be delivered to the lecturer by **November 19th**, and the two members of the group must present their work in the class in a **5 minutes lecture** on **November 26<sup>th</sup>**.

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).