

## WASM: the future of computing

*Monday 24 March 2025 15:00 (1 hour)*

WASM (WebAssembly) is a technology that defines a standard binary format that can run anywhere, disregarding of the architecture or the operative system.

Started as a technology to compile code for the browser (as the name suggest), WASM is expanding far beyond its original usecase. Its capability of running workloads on any hardware (x86, ARM, GPU, NPU) and any operative system (Linux, Windows, Browsers) makes it ideal for scientific computing, LLMs, blockchain, IoT devices. Furthermore, WASM isolation techniques are slowly replacing containers.

In this series of lectures, we will first give a look at WASM technology and use cases and then try it out with hands-on exercises.

### Number of lecture hours

1

### Number of exercise hours

1

### Attended school

tCSC 2024 (Split)

**Author:** PIMPO, Alberto

**Presenter:** PIMPO, Alberto

**Track Classification:** Performance Tuning, Accelerated Computing, GPU-based architectures