Computing Infrastructures
Exercises

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Abstract

The course topics are:

- Hardware infrastructure of datacenters:

  - Basic components, rack structure, cooling.
  - Hard Disk Drive and Solid State Disks.
  - RAID architectures.
  - Hardware accelerators.

- Software infrastructure of datacenters:

  - Virtualization: basic concepts, technologies, hypervisors and containers.
  - Computing Architecture: Cloud, Edge and Fog Computing.
  - Infrastructure, platform and software-as-a-service.

- Methods:

  - Scalability and performance of datacenters: definitions, fundamental laws, queuing network theory basics.
  - Reliability and availability of datacenters: definitions, fundamental laws, reliability block diagrams.

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