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Instrumente Structurale
2014-2020

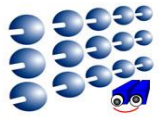
CloudUT Computing Research Infrastructure

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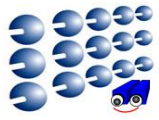


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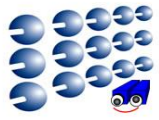
- **Title:** Cloud Cercetare UTCN – CLOUDUT
[\(http://cloudut.utcluj.ro/en/\)](http://cloudut.utcluj.ro/en/)
- **MySMIS ID:** 124493
- **Contract no.:** 235/ 21.04.2020
- **Project type:** Operational Program “Competitivitate 2014-2020” (POC)
- **Priority axis 1:** Research, technological development and innovation in support of economic competitiveness and business development
- **Action:** 1.1.2 Development R&D Centers networks, coordinated at national level and connected to European and international networks, ensuring researchers’ access to European and international scientific publications and databases
- **Financing:** European Fund of Regional Development, total project value: 4.955.000 RON out of which 4.950.000 RON from European funding.

1st Workshop of the EUT+ Data Science Institute – 18th of January 2022



- **CloudUT computing infrastructure**

- 10 computing nodes (320 cores), RAM 5120 GB, storage capacity 72TB, RAID 5
- 2 GPU nodes. Each node has 2 CPU processors by 20 cores, RAM 512 GB, SSD 1TB, 2 GPU Tesla V100 with 640 tensor cores and 5120 CUDA cores, 32GB dedicated memory, support for virtualization
- 25 Gbps internal connectivity, and 10 Gbps external connectivity
- VMware with support for management, virtualization, orchestration and automation, with vcloud features



- **Challenges in academic research**

- Interdisciplinary research domains, groups, projects
- Diversity of research topics and computing solutions
- Scientific and technical consultancy
- Research project migration into cloud
- Applications and services development over the cloud
- Computing resource management
- Standardization, Interoperability, Resource sharing, European policy on open data, FAIR data, DMP (Data Management Plan)
- Computing resource integration and scalability
- Administration in implementation and sustainability phases