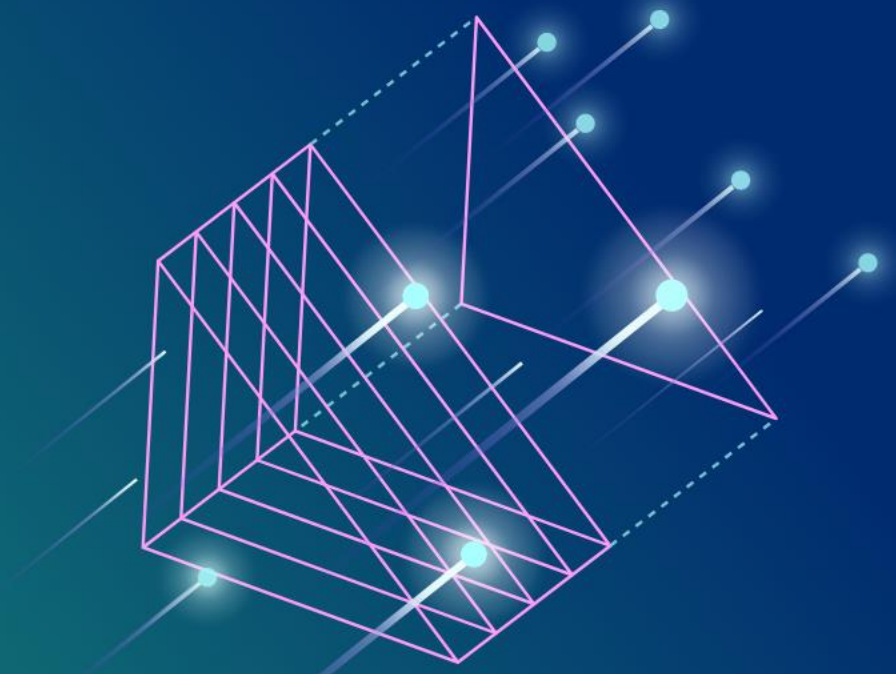
EUROPEAN BIG DATA VALUE FORUM

EuroHPC and applications

Dataspaces, AI and HPC – Infrastructure, Use Cases and Workflows



CASTIEL 2
27.10.2023, 09:00h

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Agenda

1. **Short Intro to HPC and the projects**
2. Example Workflow of AI on HPC
3. Slido
4. Panel

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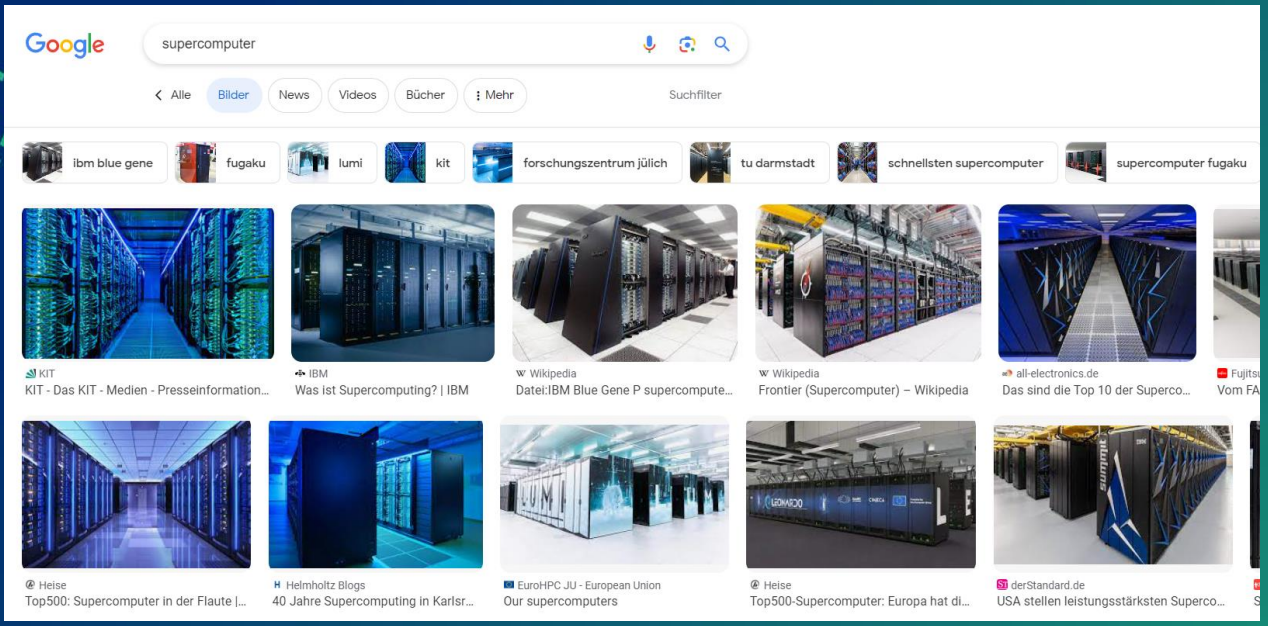
What is HPC / Supercomputing?



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Who we are

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Deputy Director at Wroclaw Centre for Networking and Supercomputing

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AI on HPC is easy or not

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HPC systems pros/cons

Pros

- many servers equipped with 4 or 8 GPU (diffrent vendors) , 1 or 2 CPU, >256GB RAM
- fast and low latency network > 100Gb/s
- fast & spacious storage systems >10PB , 1+ GB/s
- great user support
- reasonable price
- job queue

Cons

- waiting in queue
- using terminal – no gui
- diffrent enviroment – no k8s, helm, terraform, ansible etc.

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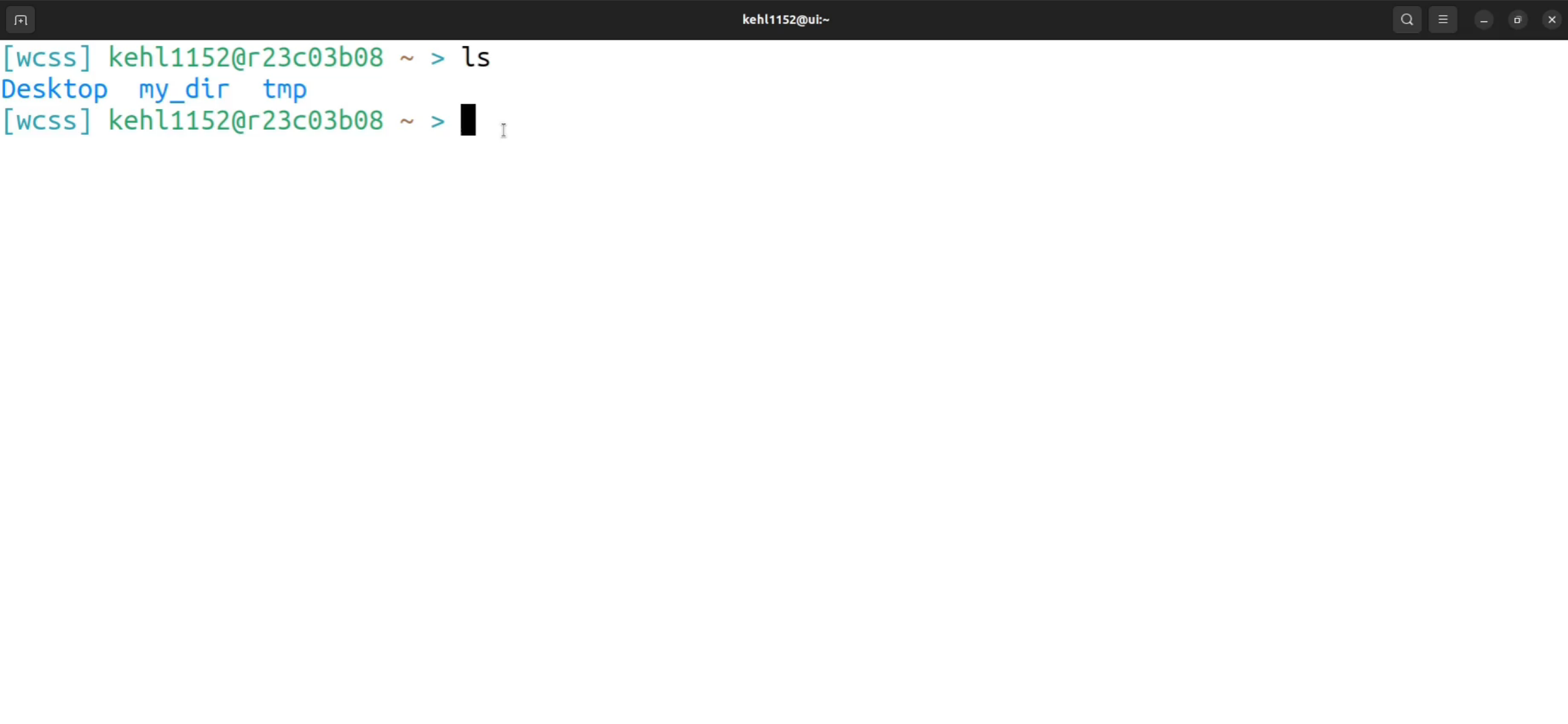
How to run AI calculations

1. Containerize you software or use prepared conatiner (Docker)
2. Convert your conatiner
3. Download your datasets and code – if needed
4. Define resources (servers, gpus, cpus, ram) – write job script
5. Submit a job
6. Wait for results

You can run many jobs with different containers/code/parameters/datasets simultaneously – there is plenty of servers and job queue


kehl1152@ui:~
[wcss] kehl1152@r23c03b08 ~ > ls
Desktop my_dir tmp
[wcss] kehl1152@r23c03b08 ~ >
Downloading the container image

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Slido

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Thank you!

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