INSTITUTE OF INFORMATICS

SLOVAK ACADEMY OF SCIENCES

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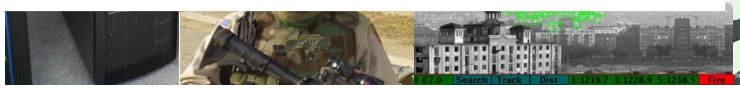

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Science is the future!

Accelerated Computing in Cloud
EGI-Engage project

- IISAS-GPUCloud – production cloud site with graphical accelerators (GPGPU)
- Cooperating on cloud middleware for GPGPU nad their integration into „EGI FedCloud“ infrastructure
- Execution of large testing to optimize efficiency and to address stability of virtuals in clouds
- Providing Horizon portal with a new module to work with OpenStack, rOCCI, etc. for EGI users
- Design, development and implementation of several scripts to automatize some work within cloud
- Support of virtual organizations and applications from EGI database „AppDB“

IISAS-GPUCloud

Hardware:

IBM dx360 M4 server with two NVIDIA Tesla K20 accelerators

16 CPU cores, 64GB RAM, 1 TB storage on each WN

2x Tesla K20 on each WN, each with 2496 CUDA cores, 5GB GDDR5 RAM, peak performance 3.52 Tflops for SP

Software

Based OS: Ubuntu 14.04 LTS

KVM hypervisor with passthrough

Openstack Liberty middleware

Newest FedCloud tools

EGI-Engage is co-funded by the Horizon 2020 Framework Programme of the European Union under grant number 654142

EOSC-hub

Integrating and managing services for the European Open Science Cloud

EOSC-hub mobilises providers from 20 major digital infrastructures, EGI, EUDAT CDI and INDIGO-DataCloud jointly offering services, software and data for advanced data-driven research and innovation.

EOSC-hub receives funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 777536.

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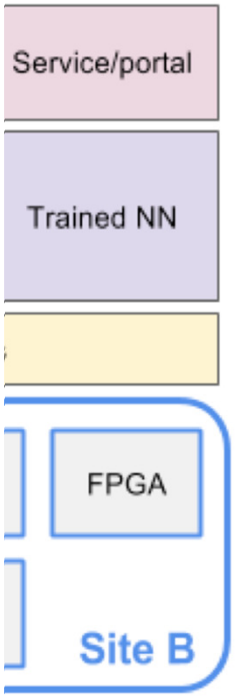

Partners: C UPV (Spain), CESNET (Czech Republic), IISAS (Slovakia), ATOS (Spain), HMGU (Germany)

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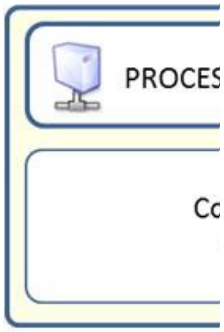

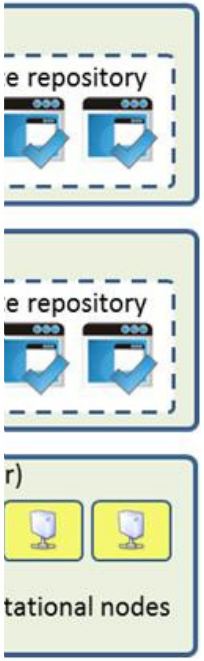

Coordinator: Ludwig-Maximilians-Universität München – Germany,

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Science is the future!

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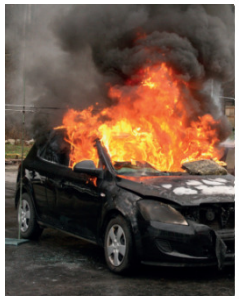

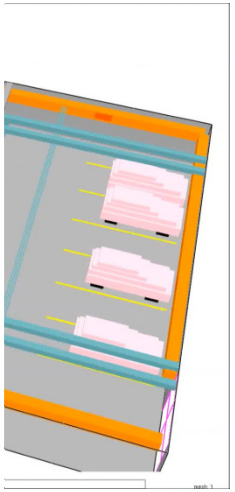

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Science is the future!

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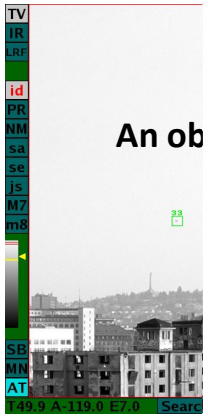

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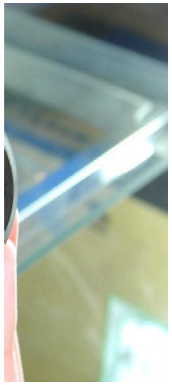

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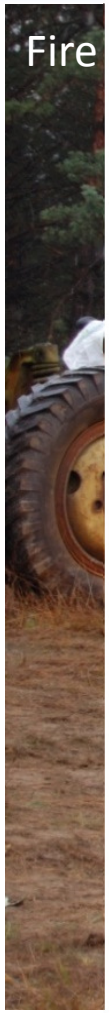

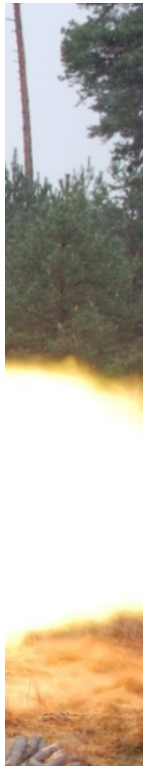

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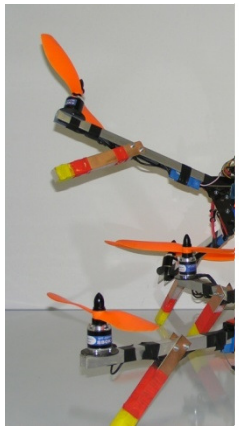
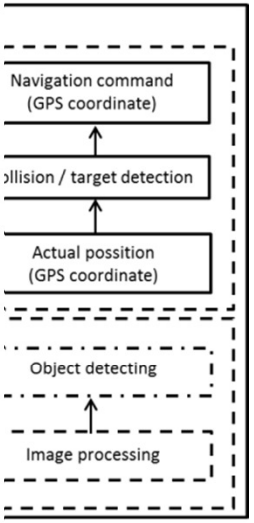
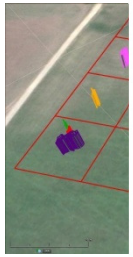
Swarm robotics and IoT laboratory







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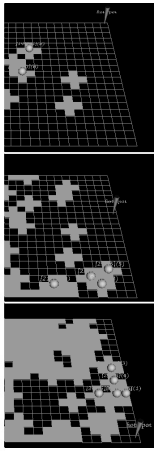
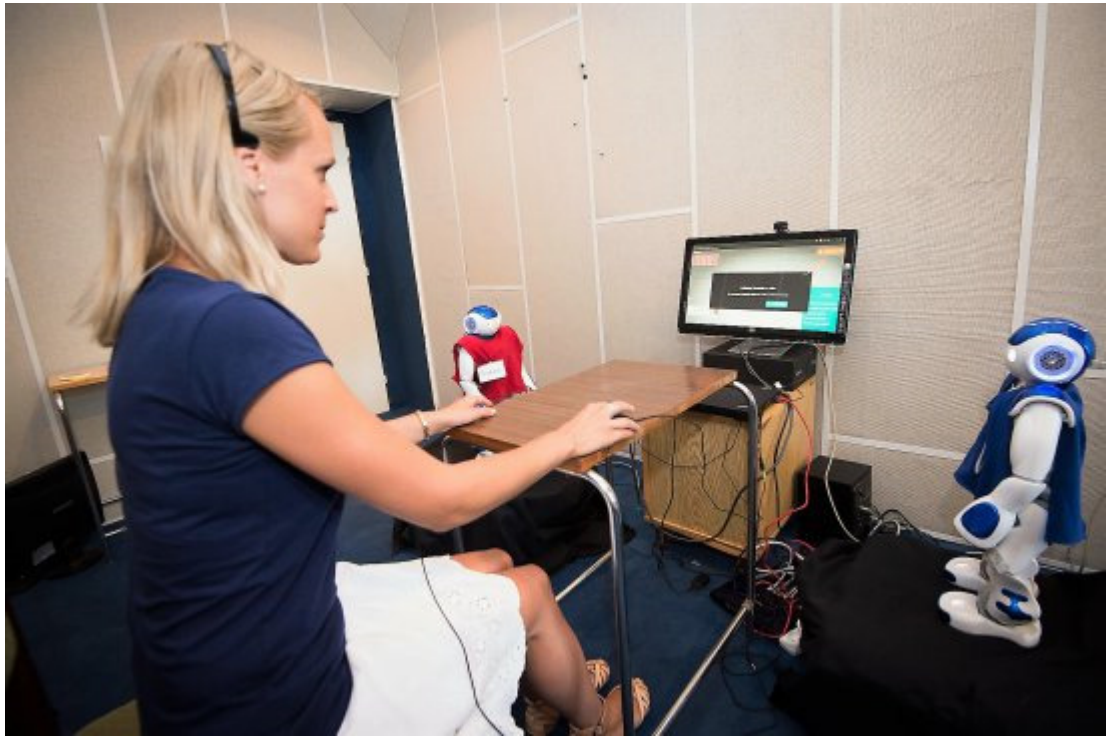


future!

Realtionship between trust and entrainment in speech

Granted by **Air Force Research Laboratory (USA)**



Human machine interaction

Thank you!

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Slovak Academy of Sciences, budinska@savba.sk

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