



**KAMK • University  
of Applied Sciences**

**HPC Hub Services from KAMK**

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Specialist, HPC Services**

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# HPC on Demand

The central services from the HPC Hub

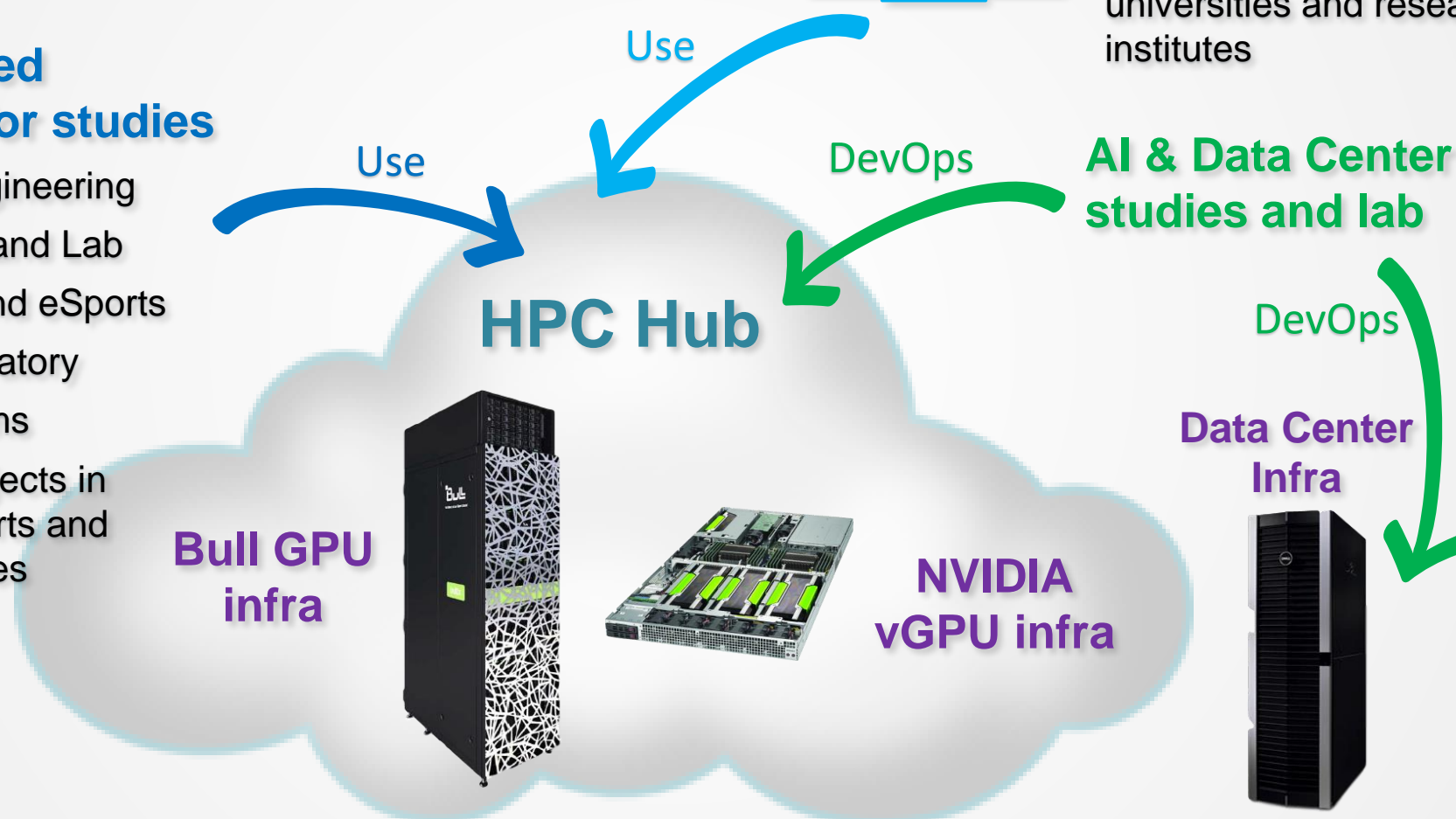


## Customized services

Business-cases  
Projects with partner  
universities and research  
institutes

## Productized services for studies

AI-based Engineering  
Data Center and Lab  
Game Dev and eSports  
VR/AR Laboratory  
Smart Systems  
AI-based projects in  
Tourism, Sports and  
Leisure studies



## AI & Data Center studies and lab

DevOps

Data Center  
Infra

# KAMK HPC-Resources

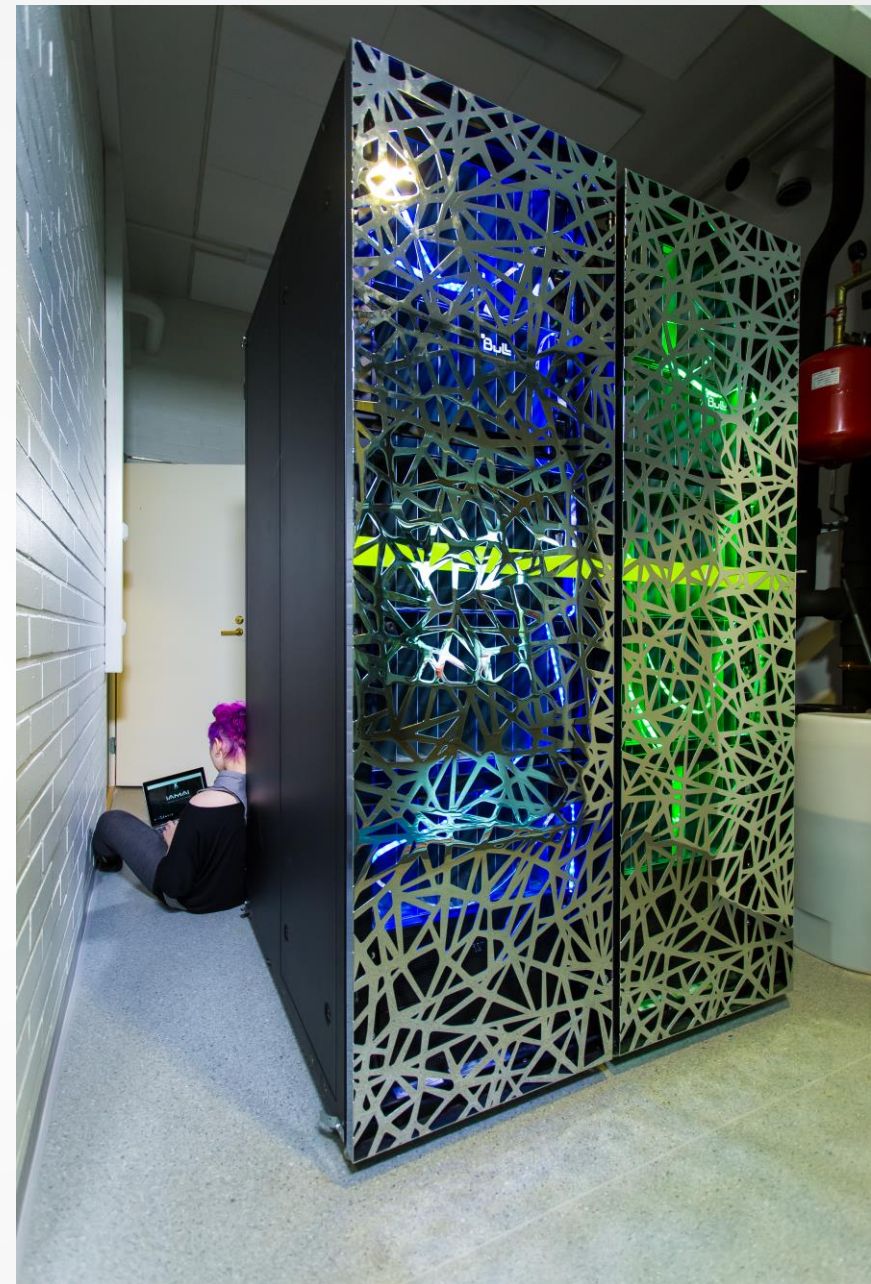
Dedicated Bull supercomputer

- Contains 224.370 GPU-cores equal to 75 game computers

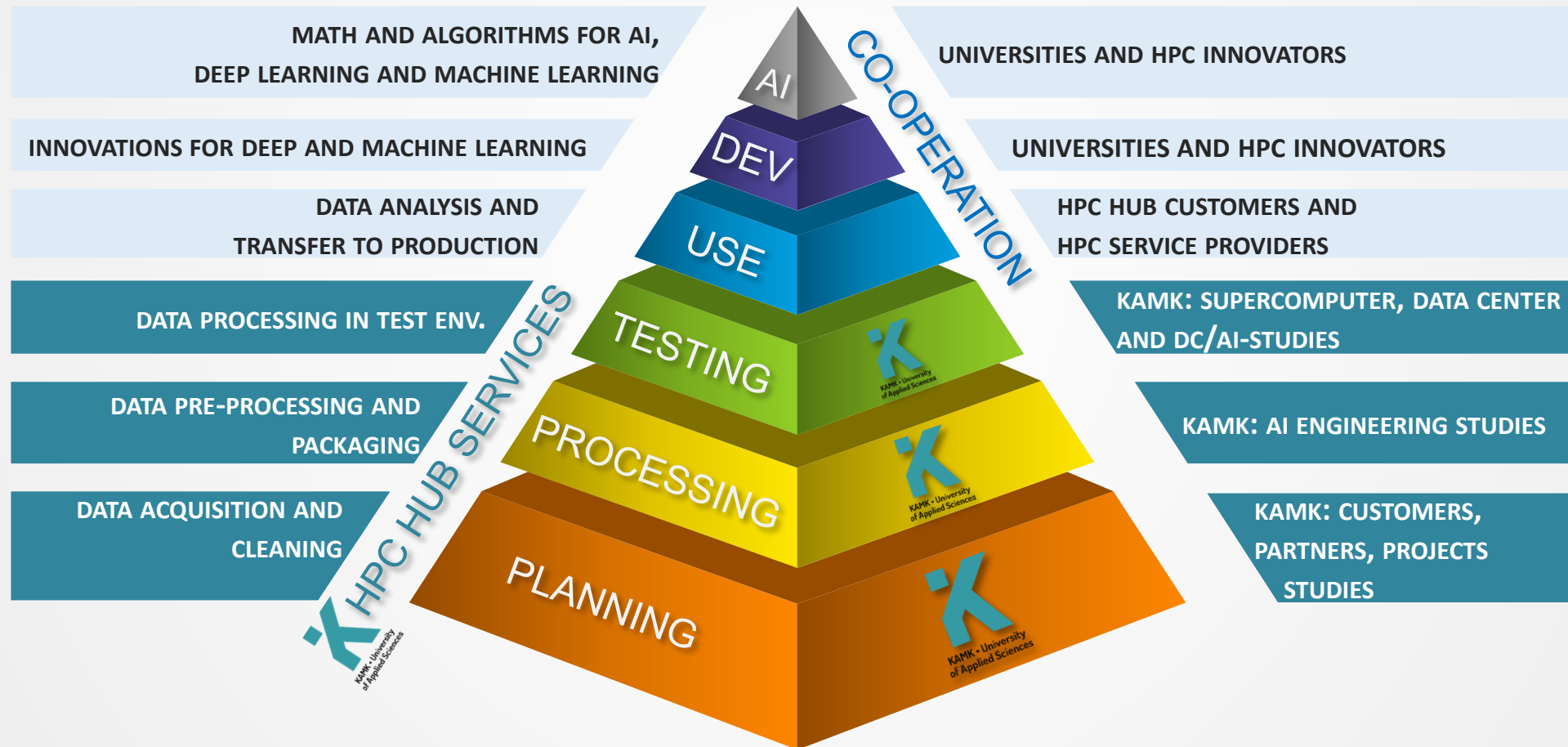
Dedicated Datacenter in FUNET

- Plenty of CPU-cores
- NVIDIA vGPU Cluster

Applications and analytic tasks can be pilot and run at KAMK, tasks are one-to-one executable in national supercomputer and forthcoming EU joint super computers LUMI and PUHTI



# Using HPC Hub Services in Data-, AI- ja Analytics Projects



# HPC Services from different Views

## SERVICES

### CAPACITY SERVICES FOR DEVOPS

GPU/CPU-compute, Storage, Virtualization, FUNET

### APPLICATION DEVELOPMENT

DevOps for AI/ML, Web and Mobile apps

### MACHINE LEARNING AND DATA ANALYTICS

Lifecycle from the business case to the piloting

### EDUCATION, COURSES AND PROJECTS

AI/ML, DC, IoT and Gaming Education; Co-Projects

## TYPE OF SERVICE

### PRODUCTIZED SERVICES

STUDENTS

TESTING / PILOTING

INDIVIDUALS

GENERAL INTEREST

### CUSTOMIZED SERVICES

COMPANIES

PROJECTS

UNIVERSITIES

INSTITUTIONS

## USERS AND FOCUS

### OPEN SOURCE, OPEN DATA, OPEN SCIENCE

Open Source DevOps with Individuals and Organizations  
Public Apps with GPL License, Open documentation  
GDPR and MyData implementation for privacy protection

### CUSTOMER-BASED DEVELOPMENT

The level of openness agreed with the customer  
Private Services and Apps with Closed Source  
Use of secure technology based on customer needs

## OPENNESS VS. PRIVACY

## TECHNOLOGIES



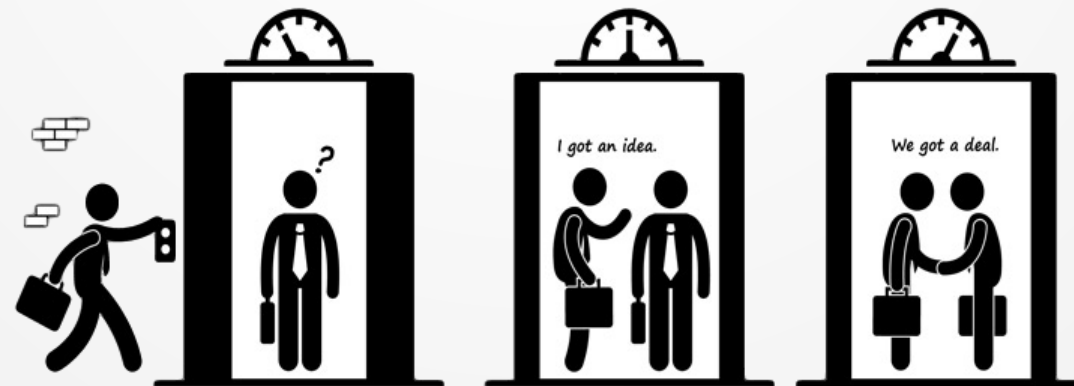
# Elevator Pitch ...in a scycraper

KAMK offers High-Performance Computing (HPC) services from the **productized capacity services** to the **custom application solutions** based on NVIDIA GPU powered supercomputer.

Customer projects are executed **in cooperation with experts from KAMK's ICT degree programmes**: "From Data to Artificial Intelligence", "Data Center" and "Game Development (VR/AR)".

We are specialized in creating **flexible and customer-based virtualized computing environments** using the latest container technologies such as Singularity, Docker and Kubernetes.

Capacity services are **available for testing and production pilot** purposes.



# All enquiries welcome!

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