Compute to Impact: Finland as a World-Leading AI Hub

AMD Silo AI
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Mission

Making Finland the world-leading AI hub

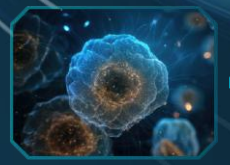
Building an ecosystem where the next generation AI solutions are developed and commercialized through open collaboration between computing infrastructure, industry partners and research institutions.

COMPUTE TO IMPACT

Making Finland The World-Leading AI Hub

AMD
together we advance_

- DEMANDING COMPUTE
- HIGH COMPLEXITY
- OPEN SOURCE



Life Sciences

Robotics & Autonomous Systems

Scientific AI, HPC & Quantum

Visual Media and Gaming

WORKSTREAM 1:
FROM COMPUTE TO APPS

Developing step-changing tools that unlock tangible breakthroughs in our strategic verticals.

WORKSTREAM 2:
AGENTIC & FOUNDATIONAL AI

Breaking the limitations by rethinking how AI is built, trained and used in the future.

WORKSTREAM 3:
EFFICIENT AI

Ensuring radically more scalable, sustainable and affordable compute globally.

AMD Silo AI Veturi Initiative 2025-2030

Healthcare & Life Sciences

Workstream 1

AMD's Life Sciences team partners closely with healthcare and life sciences organizations to bring computationally demanding research workloads onto AMD GPUs with simplicity and efficiency. We work hand-in-hand with partners to co-develop technical vision and practical solutions that accelerate time-to-insight across life sciences workflows.

Drug Discovery

Including e.g., simulating molecular interactions, analyzing large datasets from drug trials and optimizing drug design.

Omics

Collective technologies used to explore the various types of molecules that make up the cells of an organism. Includes e.g., genomics, proteomic and metabolomics.

Medical Imaging

Both laboratory-based tests and point-of-care diagnostics. Includes LLM and VLM application for e.g., diagnostic algorithms, medical imaging and biological data analysis.

Digital Health

Includes telemedicine, health informatics, and wearable technology. Focuses on e.g., design and testing of devices and processing large datasets to derive actionable insights and utilization of LLM/VLMs.

Robotics & Autonomous Systems

Workstream 1

Co-creating the open DC-GPU ROCm ecosystem for autonomous and robotic intelligence. Foundations for learning, simulation and decision-making in complex physical environments – GPU-agnostic, open-source, built with industry and academia.

World Model Foundry

Building the open training stack for world models and VLA models. Main themes include e.g., self-supervised pre-training, student-teacher pipelines, scaling laws and edge-friendly distillation.

Agentic Data Engine

Building open data engines for active data collection, curation and labeling. Main themes include e.g., forward-deployed foundation models, active learning, pseudo-annotation and HIL workflows.

Scientific AI

Workstream 1

Scientific AI focuses on enabling end-to-end workflows that combine AI models, simulations and large-scale compute for example with HPC centres. Our interest is in ensuring scientific AI to run reliably, efficiently and at scale with AMD GPUs.

Quantum

Quantum computing frameworks or the application of quantum computing algorithms with large-scale computing.

Target Domains

Projects democratizing expensive scientific computational steps by leveraging AI in e.g., surrogate models, earth sciences and materials sciences.

Agentic Workflows

Orchestrating scientific workflows with a combination of domain-specific and generic computing and AI tools with long-horizon planning.

Agentic & foundational AI

Next-generation technical breakthroughs at the forefront of AI ensuring sovereignty and competitiveness. Building top-tier expertise to produce research, patents and innovations that tackle global challenges.

Workstream 2

Agentic Systems & Methodologies

New Model Architecture

Federated Training

Model Evaluations

Efficient AI

Insufficient computing power is fast becoming the bottleneck for AI development. We are focusing on scaling and increasing performance while targeting a 50 % reduction in energy usage.

Workstream 3

Model Optimization

Distributed Training & Inference

AI Deployment

System Utilization Optimization

COMPUTE TO IMPACT

JOIN THE ECOSYSTEM

Stay connected to Finland’s most impactful AI initiative

AMD
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