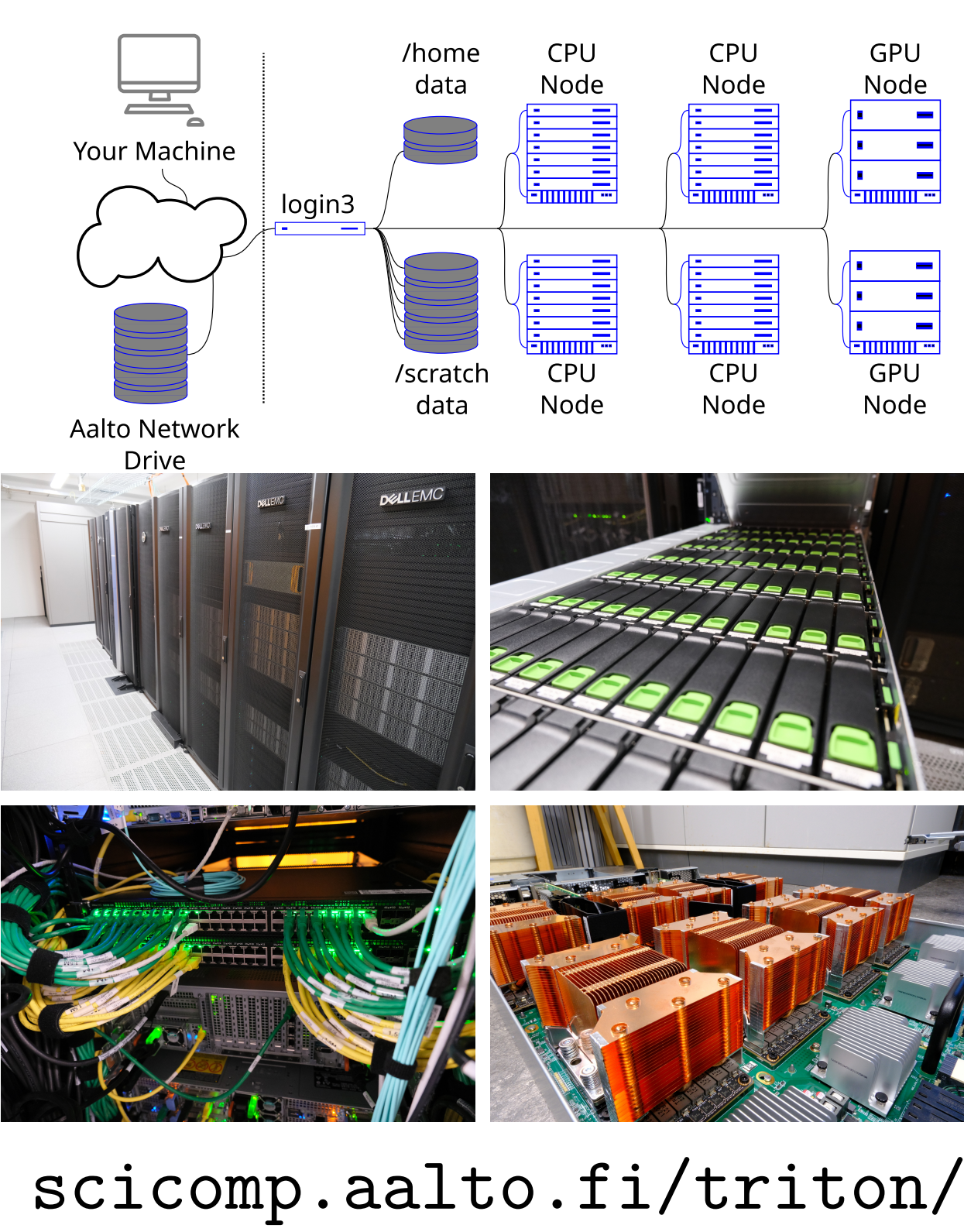


Aalto Scientific Computing (Science-IT): the tools you need for research

Aalto Scientific Computing, officially Science-IT, supports research with infrastructure (computer cluster, GPUs, data storage), practical courses right as you need them, and hands-on support.

High-performance computing



Triton resources

Access: SSH / JupyterHub / Open OnDemand / Network drives

Compute: 11000 CPUs in 292 nodes.
Latest hardware: up to 128 CPUs/node.
480+ GPUs (up to 288G mem).
Standard memory up to 512GB/node.

Networking: Infiniband up to NDR.

Speciality hardware: Grace Hopper GPUs, AMD GPUs, 2TB high-mem nodes, 3TB GPU nodes, customized group servers possible.

Data

Personal and group storage locations available. Most storage is available on Triton, department workstations, and mountable on your own laptops. Your own computer isn't a very good place for important data.

Triton scratch: Large, fast, not backed up. 5PB networked high-performance Lustre filesystem. Available on department workstations.

Project/archive: medium size, very safe. Available on Triton login nodes only.

New in 2026

New GPUs
16 × B300s (288 GiB) - ELLIS institute priority use
4 × H200 (144GB) Grace Hopper

CSC Roihu's cluster about to open
Contact us for help porting to Grace Hopper GPUs

Open-source LLM APIs
We call it ready for use
llm-gateway.aalto.fi

RSE service
Now at 11 staff, more DL and AI support

Continued LUMI support
We work to port projects to LUMI for you. Plenty of GPUs there.

LUMI AI Factory hub in Otaniemi
Hosts courses and events.

New/updated courses
Practical Deep Learning
Responsible use of AI

Training at all stages

Our courses teach the practical skills you don't learn in academic courses - tools like computer clusters or massive data storage systems.

Attend how you want, when you want
Modern teaching for a modern world:

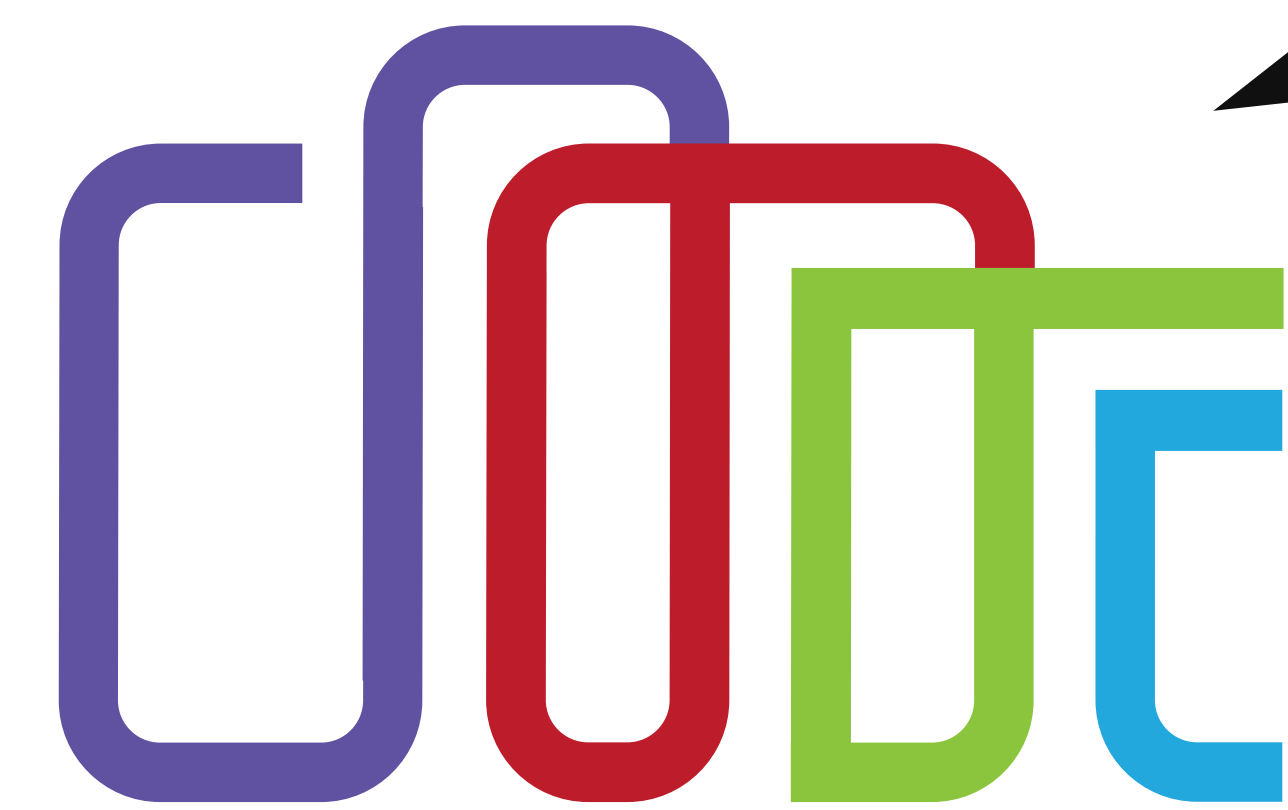
- * Livestream, anyone may attend
- * In-person exercise room
- * Zoom exercise rooms
- * All material available online
- * Recordings usually available
- * Completion certificates (for some)

Recommendations:

- * HPC Kickstart when you begin as a researcher (each June, or archive online)
- * CodeRefinery after you have started programming projects (Mar & Sep)
- * Python for SciComp: each autumn
- * Practical Deep Learning: DL on HPC, various times per year

"I really liked the metaphors and analogies for explaining the basics of when/how to use a supercomputer. Made the ideas very stickable +1"

"CodeRefinery was the best and most useful course I have had. If you need some quote to support it for the future, just make something up from me."



CODE REFINERY

"This was awesome for getting an idea about what's out there. I found especially useful the introduction to running scripts and providing arguments through command line, and the part about packaging. +1"

scicomp.aalto.fi/training/

Research support

You focus on your science.

We can help with the other computational stuff.

We support anything, not just Aalto services: Python, R, Matlab, Triton, data, software, AI coding, CSC (LUMI, clusters, data services), and whatever else you need.

You can also reach us through CS-IT, NBE-IT, PHYS-IT, Data Agents, and IT Services for Research.

scicomp.aalto.fi/help/

SciComp Garage Daily, 13:00, Zoom

A Zoom session where you can join and ask any question about Triton, scientific computing, research, etc.



scicomp.aalto.fi/help/garage/

Research Software Engineer service

Project too big to do alone?
Problem too deep to even start? The RSE service can work on these longer projects with you.

Free for basic service (come to garage)

Longer projects (1 month) funded from the project.

scicomp.aalto.fi/rse/

	Programming	Integration/workflows	Data
Help you do it	More eyes on your bug	Advise you to use array jobs for your HPC parallelization needs and show examples	Advise on best data formats for efficient data processing
Do it with you	Set up packaging and a release on the Python Package Index	Optimize your analysis for speed	Load data into database and set up your code to access it
Do it for you	Create a data collection platform for an upcoming study	Automate your analysis on all input data using Snakemake	Preprocess data, and prepare for opening via Zenodo release

Projects sizes: (G) Quick, daily, drop-in garage support, (S-M) Days-weeks funded by basic funding, (L) Longer-term funded by the projects themselves (>1 month)

Who do we support?

Our support is focused on researchers.
Using Triton is FREE for researchers at Aalto.
Courses are FREE for anyone at Aalto (and the world).
The RSE service focused on the School of Science but available outside as a pilot.

How do we work?

