

CSIT Cheatsheet^{v3.1}

Full documentation: scicomp.aalto.fi / wiki: [do.cs.aalto.fi](https://wiki.cs.aalto.fi)
scicomp.aalto.fi/aalto/welcomeresearchers/

Who?

- CS-IT: Handles CS workstations, CS data, technical procurement, loans of IT supplies. **We are here to help you and experts in facilitating research.**
 - A243 - physical location, guru@cs.aalto.fi - support address, instruction sites at top. wiki.cs.aalto.fi. Chat: scicomp.zulip.cs.aalto.fi/
- Aalto Scientific Computing: Triton (Aalto HPC cluster) and scientific software
 - scicomp.aalto.fi/triton/issues - issue tracker. Chat: see CS above.
 - scicomp@aalto.fi - account requests
 - scicomp.aalto.fi/triton/ - instructions + Scientific computing guides.
- Aalto IT (ITS): Handles Aalto accounts and all basic infrastructure
 - servicedesk@aalto.fi - ITS support address. Non-CS matters.
 - service desks: Main (Otakaari 1M) U133a, W-Th ~08:30-11, 12-14 ; Väre R101, M-T ~8:30-11 and 12-15 (check for updates)
 - it.aalto.fi
 - Aalto Gitlab: version.aalto.fi (If account blocked log in using username@aalto.fi and aalto password. This should unblock HAKA login.)
- CSC: Finland's national computing center, research.csc.fi / docs.csc.fi

Accounts and networks *info: it.aalto.fi*

- Accounts are managed by Aalto ITS, not CS-IT.
- Activation/password reset: password.aalto.fi (w. online bank ID) or srv desks.
- Wifi: aalto open: open network, everyone. eduroam: personal computers, access to protected resources. aalto=for Aalto-managed systems.
- lapa.aalto.fi: CS personal info management.
- Accounts can be extended once you leave, ask supervisor/HR for a visitor contract.

Scientific Computing *info: scicomp.aalto.fi*

- Triton (see above) has 2PB storage, ~10000 CPUs, GPUs, large mem, scientific software. Free, uses Aalto account and Aalto data, scicomp.aalto.fi/triton/
- We have various scientific software on workstations.
- www.aalto.fi/en/services/it-services-for-research - List of common Aalto services.
- Additional computational resources can be found from CSC. Link above.

Data management *info: scicomp → Aalto/Data*, Data/**

- Aalto provides many free, central, secure, backed-up storage locations. **Avoid local storage when you can!**
- Data should be stored in project directories, not home directories.
- Three main locations: project (backed up), scratch (large, no backups), archive.
- Senior staff can request new projects, see scicomp.aalto.fi. Data can be shared with any number of people.
- Use Aalto Git for version control for code, papers, etc.

Workstations and laptops

- Most are Aalto managed: login with Aalto account, passwords kept in sync. Must log in once on Aalto network before it can work.
- For heavy computation, we usually provide a powerful computer and most work is done on Triton

Linux workstations and laptops *info: scicomp → Aalto/Linux workstations*

- Primary user can install own Ubuntu packages. Use Software Center or:
 - search: `apt-cache search` install: `apt-get install PACKAGE-NAME`
- Module system: additional software, `module spider SEARCHTERM` and `module load NAME`. (desktops only). E.g. Python/tensorflow/etc ("anaconda"), Matlab, etc.
- Network drives (CS, Triton) available at `"/m/cs/*"`.
- NO local data backups: Use network drives instead. Local data lost on reinstall.

Mac laptops *info: scicomp.aalto.fi → Aalto/Mac*

- Aalto software: Managed Software Center
- Local admin rights for 15 min: Managed Software Center, install and run the "Privileges" app.
- Software installation: run Privileges app (see above) and you can install dmg files
- For advanced software, install brew. See [scicomp](https://scicomp.aalto.fi) instructions.

Windows laptops *info: scicomp.aalto.fi → Aalto/Windows*

- Aalto software can be installed from online "Self-service portal". See [scicomp](https://scicomp.aalto.fi).
- To enable admin rights, install the "Enable admin rights for primary user" application from "Start Software installation".. See [scicomp](https://scicomp.aalto.fi) instructions.

Remote access *info: scicomp.aalto.fi: Aalto/Remote access*

- magi.cs.aalto.fi: CS shell server, all filesystems mounted, can access workstations.
- [{kosh,lyta}.aalto.fi](https://kosh.lyta.aalto.fi) - all Aalto people, general shell servers. `talтта`: staff
- vdi.aalto.fi - Virtual desktop environment, Windows/Linux
- VPN: see Aalto IT instructions. Gets you on Aalto net.
- Aalto nets are: eduroam, workstation net, *aalto wifi with Aalto laptop* (130.233.*)

Printing *info: wiki: https://wiki.aalto.fi/display/CSdept/Printing*

- Aalto computers: Aalto Print, login to printer with ID card and get from any printer.
- Mobileprint: mail to emailprint@aalto.fi from Aalto email only, pick up printer.
- Web interface: printportal.aalto.fi (aalto nets only)
- Scanning/copying at printers, poster printing available for CS (see wiki)

Common software *info: wiki:*

- Cloud: Overleaf, Adobe,
- Aalto hosted: Chat (Zulip), Jupyter (jupyter.cs),