

# CSIT Cheatsheet v3.0

Full documentation: [scicomp.aalto.fi](https://scicomp.aalto.fi) / wiki: [wiki: do.cs.aalto.fi](https://wiki.cs.aalto.fi)  
[scicomp.aalto.fi/aalto/welcomeresearchers/](https://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](mailto:guru@cs.aalto.fi) - support address, instruction sites at top. [wiki.cs.aalto.fi](https://wiki.cs.aalto.fi). Chat: [scicomp.zulip.cs.aalto.fi/](https://scicomp.zulip.cs.aalto.fi/)
- Aalto Scientific Computing: Triton (Aalto HPC cluster) and scientific software
  - [scicomp.aalto.fi/triton/issues](https://scicomp.aalto.fi/triton/issues) - issue tracker. Chat: see CS above.
  - [scicomp@aalto.fi](mailto:scicomp@aalto.fi) - account requests
  - [scicomp.aalto.fi/triton/](https://scicomp.aalto.fi/triton/) - instructions + Scientific computing guides.
- Aalto IT (ITS): Handles Aalto accounts and all basic infrastructure
  - [servicedesk@aalto.fi](mailto: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](https://it.aalto.fi)
  - Aalto Gitlab: [version.aalto.fi](https://version.aalto.fi)
- CSC: Finland's national computing center, [research.csc.fi](https://research.csc.fi)

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

- Accounts are managed by Aalto ITS, not CS-IT.
- Activation/password reset: [password.aalto.fi](https://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](https://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/](https://scicomp.aalto.fi/triton/)
- We have various scientific software on workstations.
- [www.aalto.fi/en/services/it-services-for-research](https://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](https://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
- To install any software: Managed Software Center, install "Get temporary admin rights" and you can install programs (dmg files) yourself for 30 minutes.
- 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 install most other software, you must apply for a "wa" (workstation admin) account. 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` - all Aalto people, general shell servers. `talitta`: 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: IT/Printing (not on scicomp yet)*

- Check wiki for instructions: [wiki.aalto.fi/display/CSdept/Printing](https://wiki.aalto.fi/display/CSdept/Printing)
- Secure Print is recommended: print to one queue, pick up anywhere. Identify with Aalto account / HSL card. Various locations, check wiki.
- Mobileprint: mail to [mobileprint@aalto.fi](mailto:mobileprint@aalto.fi) from Aalto email only, pick up at Secure Print printer.
- Scanning/copying: use Secure Print printers.
- Poster printing available for CS, see wiki