

What else?

A brief discussion about what else LUST offers, what is not covered in this course, and how you can learn about it.

Kurt Lust
LUMI User Support Team (LUST)
University of Antwerp

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What did we not cover?

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- For several topics, this course gave only a brief overview with many details omitted
- General topics not covered at all:
  - Guidelines for writing HPC-friendly code
  - Debugging and profiling tools
  - Developing (portable) code for GPU and optimising that code
- And it is not a very domain-specific course (well, the domain is "LUMI supercomputer" and not CFD or molecular dynamics or AI)

LUST trainings

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- Introductory training: Basically this training…
- Advanced training and "Performance Analysis and Optimisation workshop" Oriented towards traditional HPC:
  - Mostly given by HPE and AMD experts
  - Covers also debugging and profiling tools, and a bit about writing HPC-friendly code
  - Some topics of this course covered in more depth
  - On-site recommended for contact with HPE and AMD experts
- AI on LUMI: Workshop-style training on AI
  - Next edition end of November in Riga
  - On-site necessary for the full experience as we cannot properly assist with remote coursework, but the lectures are available to online participants also

Other trainings

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- PRACE coordination is no more, EuroHPC is starting up EVITA
  - For now overview on the HPC in Europe Portal
  - Courses about tools, about programming paradigms, …
- AMD provides trainings in Europe from time to time
  - Excellent materials from a course at ENCCS, with recordings on YouTube
- LUMI consortium countries also organise courses from time to time
  - E.g., in January 2024 there was a GROMACS course at CSC in collaboration with BioExcell and the EuroHPC national competence centres of Finland and Sweden
  - Some of those courses are also announced on the LUMI web site
- AI: The "AI Factories" and MINERVA should provide most of these trainings
  - LUMI AI Factory is building up its trainings, but the basic LUMI AI training will be done with LUST
  - MINERVA so far has done a number of webinars but no full training

Other LUST services

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- One or two "hackathons" per year: No specific theme, but for optimisation of your code with the help of experts from HPE, AMD and LUST
  - One week, so a clear goal is needed
  - Next one likely in the spring of 2027, focus on the next system already
- Porting call: When resources allow, we also launch a call for assistance in porting code
  - Assitance = you guarantee availability of people in the time window
  - Help from experts at HPE, AMD and LUST
  - Selection partly based on potential impact of the code
  - No more for the current system, but may return for the next system
- Monthly virtual user coffee break
  - Usually last Wednesday of the month
  - Sometimes with a short presentation
  - Experts from HPE and AMD also present

Other support services

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- Check with your local organisation as some have support programs
- EPICURE program (epicure-hpc.eu)
  - Larger support projects: 1-3 personmonths from EPICURE, and expect a similar effort from the applicant during that period
  - Need a EuroHPC project, but a development project is enough
  - Can go from optimising a complex software installation, to help with optimising and porting your own codes for EuroHPC supercomputers
  - Don't expect domain knowledge about every science domain and all software packages!
- Something coming up from MINERVA and/or the AI factories?

LUMI web sites

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- Main LUMI web site at lumi-supercomputer.eu
  - Links to information on obtaining an allocation and to training events
- Documentation split in three:
  - docs.lumi-supercomputer-eu: Everything except documentation that is very specific to a single package
  - LUMI Software Library at lumi-supercomputer.github.io: Package-specific information for all software for which we have some support
  - LUMI AI Guide at github.com/Lumi-supercomputer/LUMI-AI-Guide
- LUMI training materials at lumi-supercomputer.github.io: Archive of past LUMI trainings and user coffee break presentations
  - Not all materials online, some only available on LUMI
- Some local organisations have documentation that is relevant to LUMI
  - We link to it if it is a real addition to our materials and we know about it


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The End...