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# GPU Programming Workshop

3 – 6 February 2025

Workshop material:

<https://tinyurl.com/hdli1w24>



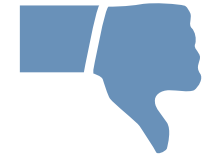
# Survey



- Please fill out the online survey under



<https://tinyurl.com/hdli1w24-survey>



- This helps us to
  - increase the quality of the courses,
  - design the future training programme at LRZ and GCS according to your needs and wishes,
  - get future funding for training events.



# Certificate



- A digital certificate for the whole workshop will be send to you in the next couple of days if you have attended at least 3 days of the course.

# What's next?



- Visit the NVIDIA Deep Learning Institute's website at <https://www.nvidia.com/en-gb/training/> to access more training and resources.
  - Start online, self-paced training in deep learning and accelerated computing (using the account you created today).
  - View upcoming workshops around the world and request an onsite workshop at your company or organization
  - Learn about the University Ambassador Program.
- Ready to kick off a deep learning project or already working on one? Choose the best software and hardware solutions at <https://developer.nvidia.com/deep-learning>



- The **NVIDIA Deep Learning Institute (DLI) @ LRZ** offers hands-on training for developers, data scientists, and researchers looking to solve challenging problems with deep learning.
- Topics:
  - **Fundamentals of Deep Learning**
  - Data Parallelism - How to Train Deep Learning Models on Multiple GPUs
  - Model Parallelism - Building and Deploying Large Neural Networks
  - Building Transformer-Based Natural Language Processing Applications
  - Applications of AI for Anomaly Detection
  - **Fundamentals of Accelerated Computing with CUDA C/C++**
  - **Accelerating CUDA C++ Applications with Multiple GPUs**
  - **Scaling CUDA C++ Applications to Multiple Nodes**
  - **Fundamentals of Accelerated Computing with OpenACC**
- **NVIDIA Certified University Ambassadors @ LRZ:**
  - Dr. Momme Allalen, Ajay Navilarekal Rajgopal, Dr. Volker Weinberg

# Upcoming Courses and Workshops by LRZ

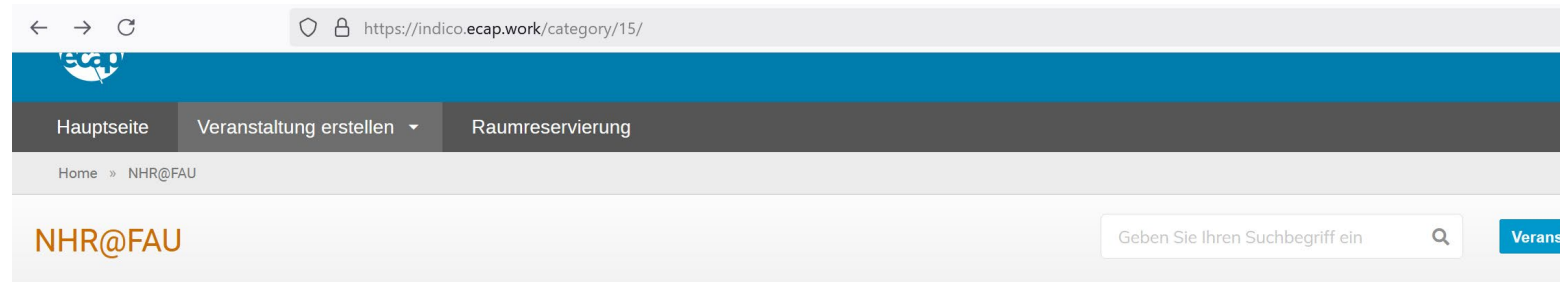


AI Training Series - Fundamentals of Deep Learning - powered by NVIDIA	11.02.2025 – 11.02.2025	Leibniz Rechenzentrum	0.00 EUR	0	04.02.2025	Waiting list
Introduction to CoolMUC-4 with Focus on CFD and FEM Workflows	13.02.2025 – 13.02.2025	ONLINE	0.00 EUR	48	06.02.2025	Register now
Parallel Programming of High Performance Systems	18.02.2025 – 20.02.2025	Leibniz Rechenzentrum	0.00 EUR	0	04.02.2025	Waiting list
Programming with Fortran	11.03.2025 – 13.03.2025	ONLINE	0.00 EUR – 600.00 EUR	62	04.03.2025	Register now
Hybrid HPC Quantum Computing at LRZ	12.03.2025 – 12.03.2025	Leibniz Rechenzentrum	0.00 EUR	40	05.03.2025	Register now
Introduction to CoolMUC-4 with Focus on CFD and FEM Workflows	13.03.2025 – 13.03.2025	ONLINE	0.00 EUR	56	06.03.2025	Register now
Introduction to CoolMUC-4 with Focus on CFD and FEM Workflows	10.04.2025 – 10.04.2025	ONLINE	0.00 EUR	63	03.04.2025	Register now
AI Training Series - Orientation Session	05.05.2025 – 06.05.2025	ONLINE	0.00 EUR	97	28.04.2025	Register now
AI Training Series - Introduction to Container Technology & Application to AI at LRZ	16.05.2025 – 16.05.2025	Leibniz Rechenzentrum	0.00 EUR	38	09.05.2025	Register now
AI Training Series - Introduction to the LRZ AI Systems	21.05.2025 – 21.05.2025	Leibniz Rechenzentrum	0.00 EUR	39	14.05.2025	Register now

# Upcoming Courses by NHR@FAU



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Category for events of the Erlangen National High Performance Computing Center (NHR@FAU)

8 Veranstaltungen liegen in der Zukunft. [Ausblenden](#)

Juli 2025

31. Juli [\[Online\] Introduction to the LIKWID tool suite](#)

April 2025

16. Apr. [\[Online\] Fundamentals of Accelerated Computing with OpenACC](#)

11. Apr. [\[Online\] GPU Performance Engineering](#)

09. Apr. - 10. Apr. [\[Online\] Introduction to Parallel Programming with MPI](#)

02. Apr. [\[Online\] Fundamentals of Accelerated Computing with CUDA Python](#)

März 2025

26. März [\[Online\] Scaling CUDA C++ Applications to Multiple Nodes](#)

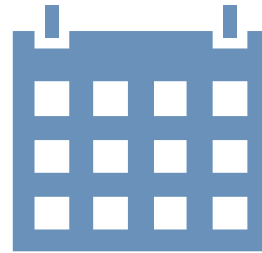
19. März [\[Online\] Accelerating CUDA C++ Applications with Multiple GPUs](#)

12. März [\[Online\] Fundamentals of Accelerated Computing with CUDA C/C++](#)

Februar 2025

26. Feb. - 28. Feb. [\[Online\] Introduction to OpenMP](#)

# Upcoming Courses and Workshops



- **Information on further HPC courses and events:**

- by LRZ: <http://www.lrz.de/services/compute/courses/>
- by the Gauss Centre of Supercomputing (GCS): <http://www.gauss-centre.eu/training>
- by German Centres (collected by the Gauß-Allianz): <https://hpc-calendar.gauss-allianz.de/>
- by the EuroHPC National Competence Centres: <https://www.eurocc-access.eu/services/training/>
- by European Centres and Projects: <https://hpc-portal.eu/upcoming-events-courses>



# Mailing Lists



- Subscribe via <https://lists.lrz.de/mailman/listinfo/training-announce> to get regular information on education and training events at LRZ.
- Subscribe via <https://www.lrz.de/wir/newsletter/> to get the general LRZ newsletter.
- Subscribe via <https://www.listserv.dfn.de/sympa/subscribe/nhr-announcements> for NHR training announcements.



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**Thank you!**  
**We hope to see you again in a future training event!**