



DEEP  
LEARNING  
INSTITUTE



# PRACE Workshop: Deep Learning and GPU Programming Workshop

10 – 13 May 2022



VSB TECHNICAL  
UNIVERSITY  
OF OSTRAVA

IT4INNOVATIONS  
NATIONAL SUPERCOMPUTING  
CENTER

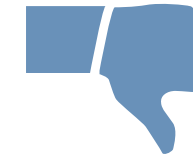
# PRACE Survey



- Please fill out the PRACE online survey under



<https://tinyurl.com/survey-dli-csc>



- This helps us and PRACE to
  - increase the quality of the courses,
  - design the future training programme at CSC, IT4Innovations, LRZ and in Europe according to your needs and wishes,
  - get future funding for training events.

# CSC Certificate



- A digital certificate for the whole workshop will be send to you by CSC next week 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>

# NVIDIA DLI Workshops @ LRZ



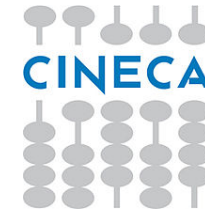
- The **NVIDIA Deep Learning Institute (DLI) @ LRZ** offers hands-on training for developers, data scientists, and researchers looking to solve challenging problems with deep learning.
- Topics:
  - **Fundamentals of Deep Learning**
  - **Building Transformer-Based Natural Language Processing Applications**
  - **Fundamentals of Deep Learning for Multi-GPUs**
  - **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, Dr. Juan Durillo Barrionuevo, Dr. Volker Weinberg
- NVIDIA Certified **University Ambassador @ IT4Innovations**: Georg Zitzlsberger

# PRACE Training



LRZ as part of the Gauss Centre for Supercomputing (GCS), CSC and IT4Innovations belong to the 14 **PRACE Training Centres** that started in 2012-2017-2020:

- Barcelona Supercomputing Center (Spain)
- CINECA Consorzio Interuniversitario (Italy)
- CSC – IT Center for Science Ltd (Finland)
- EPCC at the University of Edinburgh (UK)
- Gauss Centre for Supercomputing (Germany)
- Maison de la Simulation (France)
- GRNET – Greek Research and Technology Network (Greece)
- ICHEC – Irish Centre for High-End Computing (Ireland)
- IT4I – National Supercomputing Center VSB Technical University of Ostrava (Czech Republic)
- SURFsara (The Netherlands)
- TU Wien – VSC Research Center (Austria)
- University ANTWERPEN – VSC & CÉCI (Belgium)
- University of Ljubljana – HPC Center Slovenia (Slovenia)
- Swedish National Infrastructure for Computing (SNIC) (Sweden)



Univerza v Ljubljani



Irish Centre for High-End Computing

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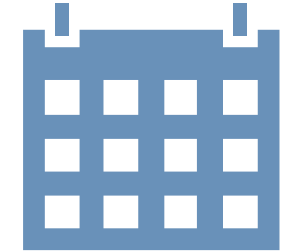
**Mission:** Serve as **European hubs and key drivers of advanced high-quality training** for researchers working in the computational sciences.

<http://www.training.prace-ri.eu/>



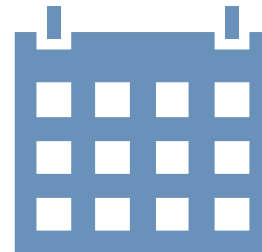


# Upcoming Courses and Workshops @ LRZ



Introduction to LRZ HPC Systems with Focus on CFD Workflows	14.06.2022 – 14.06.2022	ONLINE	0.00 €	63		<a href="#">Register now</a>
Hybrid Programming in HPC - MPI+X (register via PRACE)	22.06.2022 – 24.06.2022	ONLINE	0.00 €	65		
HPC Code Optimisation Workshop (register via PRACE)	27.06.2022 – 29.06.2022	ONLINE	0.00 €	65		
Deep Learning and GPU programming using OpenACC @ HLRS (register via HLRS)	12.07.2022 – 14.07.2022	Universität Stuttgart - Höchstleistungsrechenzentrum Stuttgart	0.00 €	65		
Deep Learning Week	25.07.2022 – 29.07.2022	ONLINE	0.00 €	4		<a href="#">Register now</a>
Introduction to LRZ HPC Systems with Focus on CFD Workflows	10.08.2022 – 10.08.2022	ONLINE	0.00 €	65		<a href="#">Register now</a>
Introduction to LRZ HPC Systems with Focus on CFD Workflows	12.10.2022 – 12.10.2022	ONLINE	0.00 €	65		<a href="#">Register now</a>
Introduction to ANSYS Fluent	27.10.2022 – 08.12.2022	ONLINE	0.00 €	49		<a href="#">Register now</a>
Introduction to LRZ HPC Systems with Focus on CFD Workflows	14.12.2022 – 14.12.2022	ONLINE	0.00 €	65		<a href="#">Register now</a>

# Upcoming Courses and Workshops



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

- by the Partnership for Advanced Computing in Europe (PRACE): <http://www.training.prace-ri.eu/>
- by CSC: <https://www.csc.fi/en/training>
- by IT4Innovations: <https://www.it4i.cz/en/education/training-activities> / <https://events.it4i.cz/>
- 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 EuroCC national competence centres: <https://www.eurocc-access.eu/services/training/>



# Mailing Lists



- Subscribe via <https://www.csc.fi/en/newsletter> and you will receive news from CSC, including updates on new services and information on upcoming courses.
- To receive the latest information on upcoming training events at IT4Innovations, send an e-mail to [training@it4i.cz](mailto:training@it4i.cz).
- Subscribe via <https://lists.lrz.de/mailman/listinfo/newsletter> to get regular information on events, courses, workshops, positions etc. at LRZ.
- Subscribe via <https://prace-ri.eu/subscribe-to-prace-mailing-lists/> to the PRACE training mailing list, to get regular information on PRACE training.



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**Thank you!**

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



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