Building Transformer-Based Natural Language Processing Applications

LRZ | 19 October 2021

Survey

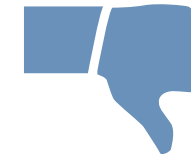- Please fill out the online survey under

https://tinyurl.com/survey-nlp

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

What's next?

- Visit the NVIDIA Deep Learning Institute's website at https://www.nvidia.com/en-gb/deep-learning-ai/education/ 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**
  - **Fundamentals of Accelerated Computing with OpenACC**
- NVIDIA Certified **University Ambassadors @ LRZ:**
  - Dr. Momme Allalen, Dr. Juan Durillo Barrionuevo, Dr. Volker Weinberg
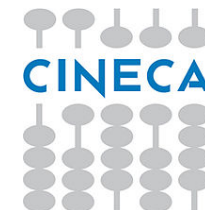- NVIDIA Certified University Ambassador @ IT4Innovations: Georg Zitzlsberger

PRACE Training

LRZ as part of the Gauss Centre for Supercomputing (GCS), VSC 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)

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

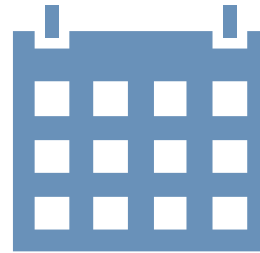|						
Building Transformer-Based Natural Language Processing Applications	19.10.2021 – 19.10.2021	ONLINE	0.00 €	11	⊘	
Introduction to ANSYS Fluent	28.10.2021 – 02.12.2021	ONLINE	0.00 €	20	✓	Register now
HPC Code Optimisation Workshop (register via PRACE)	02.11.2021 – 04.11.2021	ONLINE	0.00 €	65	⊘	
Modern C++ Software Design	17.11.2021 – 19.11.2021	ONLINE	30.00 € – 600.00 €	42	✓	Register now
Introduction to LRZ HPC Systems with Focus on CFD Workflows	17.11.2021 – 17.11.2021	ONLINE	0.00 €	57	✓	Register now
Advanced Fortran Topics (register via PRACE)	23.11.2021 – 26.11.2021	ONLINE	0.00 €	65	⊘	
Accelerating CUDA C++ Applications with Multiple GPUs	30.11.2021 – 30.11.2021	ONLINE	0.00 €	39	✓	Register now
Node-Level Performance Engineering (register via PRACE)	01.12.2021 – 03.12.2021	ONLINE	0.00 €	65	⊘	
Molecular Modeling with Schrödinger-Suite	06.12.2021 – 07.12.2021	ONLINE	0.00 €	128	⊘	Register now
Introduction to LRZ HPC Systems with Focus on CFD Workflows	19.01.2022 – 19.01.2022	ONLINE	0.00 €	64	⊘	Register now
AI for Science Bootcamp	01.02.2022 – 02.02.2022	ONLINE	0.00 €	60	⊘	
Parallel Programming of High Performance Systems	08.03.2022 – 10.03.2022	ONLINE or RRZE (tbd)	0.00 € – 600.00 €	36	⊘	
N-Ways to GPU Programming Bootcamp	14.03.2022 – 15.03.2022	ONLINE	0.00 €	60	⊘	

Upcoming Courses and Workshops

- **Information on further HPC courses:**
  - by the Partnership for Advanced Computing in Europe (PRACE): http://www.training.prace-ri.eu/
  - 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/

Mailing Lists

- Subscribe via https://lists.lrz.de/mailman/listinfo/aktuell 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.

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