From Basics to Mastery: How to Advance AI, HPC and Metaverse Technical Skills

Choose from 65 hands-on workshops and labs at NVIDIA GTC, running March 20-23.

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As technology advances, it's essential for developers, students and educators to stay ahead of the curve through continuous learning. This is especially true for those interested in AI, high performance computing and the metaverse, as these technologies evolve fast.

Beginners, experts and everyone in between can advance their technical skills in these fields by a ttending NVIDIA GTC — a global technology conference running online March 20-23. With 65 hands-on workshops and labs on these topics, GTC offers a unique opportunity to learn by doing.

Those who are new to deep learning, accelerated computing, graphics or simulation can kick-start their journey with these GTC sessions:

Introduction to "Learning Deep Learning" — Taught by Magnus Ekman, director of architecture at NVIDIA and author of Learning Deep Learning , this training covers the essentials of deep learning for those without prior machine learning skills.

Fundamentals of Deep Learning — Learn how to train deep learning models from scratch through hands-on exercises in computer vision and natural language processing (NLP).

Using Machine Learning for Anomaly Detection and Predictive Maintenance Scenarios — P articipate in this interactive, practical lab and tutorial on using machine learning techniques to detect anomalies in sensor and machine data and predict when maintenance failures might occur.

Those who want to learn more about specific use cases or technology can dive deeper with these two-hour training labs:

Focused on Industrial Usability: Building Simulation Tools for Manufacturing Automation — Learn how to build simulation applications specifically for automation use cases with the NVIDIA Omniverse platform.

Building Session-Based Recommendation Models With NVIDIA Merlin — Discover the main concepts and algorithms for session-based recommendation (SBR), and learn how to process the data and create sequential features, develop SBR models, and train and evaluate them on a GPU.

Understanding the Chemical and Biological Language of Life With Large Language Models Using BioNeMo — Get familiar with the NVIDIA BioNeMo service and framework, as well as its applications. Plus, take a deeper dive into inference using pretrained models available with BioNeMo: ESM1nv, ProtT5nv and MegaMolBART.

Those looking for more advanced training can take their expertise to the next level with full-day workshops:

Building Conversational AI Applications — Le arn how to quickly build and deploy production-quality conversational AI applications with real-time transcription and NLP capabilities.

Model Parallelism: Building and Deploying Large Neural Networks — Find out how to train the largest neural networks and deploy them to production.

Building Transformer-Based Natural Language Processing Applications — Discover how to use pretrained, modern NLP models to solve tasks such as text classification, named-entity recognition and question answering.

With the depth and breadth of workshops and labs available at GTC — all taught by industry experts — attendees can select the sessions most relevant to their needs and interests. Workshops feature affordable prices, free labs, support across time zones and teaching in multiple languages.

View the complete list of workshops and labs .

Sessions fill up quickly, so register free for GTC and sign up for training today.