

# HPE AI at Scale tools workshop

## Rapidly train, tune, and deploy large-scale AI

Place: S4A

Date: 4<sup>th</sup> of October, 12:00

More complex models and larger data sets for both artificial intelligence (AI) and modeling and simulation (MOD/SIM) are pushing organizations to a level of computing that — until just a few years ago — was reserved for supercomputing sites on a national level.

Hewlett Packard Enterprise (HPE) offers hardware infrastructure and software tools to build, train, tune and deploy large-scale AI. Workshop is aimed at Data Science Professionals, Machine Learning, Deep Learning Engineers and Developers.

What will you get out of the workshop:

- Hands-on AI/ML exercises and demonstrations (Remember to take your laptop with you!)
- Best practice sharing and networking with other industry-leading AI experts.
- An understanding of the challenges and solutions to successfully deliver AI projects in your organization: Learn how you can scale your AI model training across billions of parameters in an efficient and sustainable way. And why hyper-parameter optimization is key to this. Learn how to take a Large Language Model (LLM) and fine-tune it on an industry-specific dataset. Learn how to maintain complete reproducibility through data and experiment lineage.

**With the HPE Machine Learning Development Environment, ML practitioners can:**

- Train models faster using state-of-the-art distributed training, without changing their model code
- Automatically find high-quality models with advanced hyperparameter tuning from the creators of state-of-the-art tuning algorithms such as Hyperband
- Get more from their GPUs with smart scheduling, as well as reduce cloud GPU costs by seamlessly using spot instances
- Track and reproduce their work with experiment tracking that works out of the box, covering code versions, metrics, checkpoints, and hyperparameters

**What HPE Machine Learning Data Management Software offers:**

- Data-driven pipelines that are automatically triggered based on detecting changes
- Immutable data lineage with data versioning of any data type
- Autoscaling and parallel processing built on Kubernetes for resources
- Standard object stores usage for data storage with automatic deduplication
- Supports any programming language by utilizing a cloud-native environment
- Deploy on major cloud providers and on-premises installations

You can also find a recorded demo of MLDE and MLDM at <https://hpedemoportal.ext.hpe.com/home>



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