



DiRAC SKILLS TRAINING

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Cardiff

Introduction



DiRAC Training Academy

<https://dirac.ac.uk/training/>

- Comprehensive structured programme of training and support
- Academic- and industry-focused opportunities
- In-person and remote events
- Advertised via All User email and on our social media platforms
- Fosters development of skills at all levels

Foundation HPC Skills Course

- Gateway to HPC focusing on key essential skills:
 - ❖ Unix Environment
 - ❖ Command Scripts
 - ❖ Version Control
 - ❖ Software Engineering
 - ❖ Testing and Code Scaling
- All material is available self-paced on our website





HPC Training



Introduction to SLURM

Mastering the queuing system; Efficiently Manage Job Submission; Optimize with Module Commands; Explore a range of HPC Job Types

Introduction to MPI

First Steps in MPI; Point-to-point, Collective and Non-Blocking Communications; Porting Serial Code and Optimising MPI applications

Introduction to OpenMP

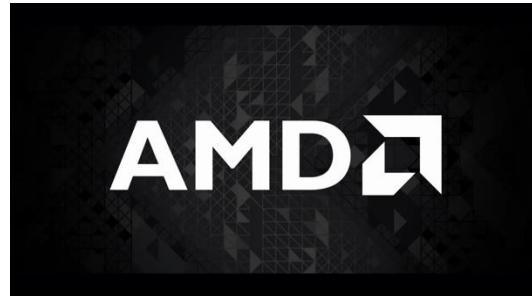
Foundation of Parallelism; First Steps in OpenMP; Building Parallel Applications; Mastering Synchronization and hybrid Parallelism



Joint-Industry Training



Broad overview of different GPU pathways available



Advanced OpenMP and introduction to HIP



Hardware agnostic approach to porting code with oneAPI

Joint-Industry Training



Unleashing the Power of AMD's MI300 Series

Discover the Potential

- ❖ Introductory Training: March 11-12th 2025; Online
- ❖ **Mastering the latest GPU architecture**
- ❖ In-Person Hackathon: April 1st – 3rd 2025; London

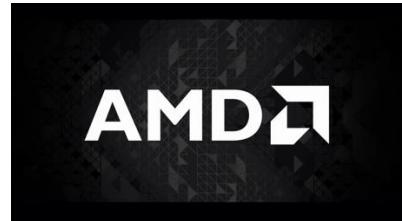
Registration opens January 2025

Fundamentals of Deep Learning

- ❖ Online Workshop: Q2 2025

Advanced GPU Programming

- ❖ Online Introductory Training: Q3 2025
- ❖ In-Person 3-day Hackathon: Q3 2025



Innovation Placement Scheme



Recent Placements



Health Data Research UK



QUANTIFYING THE EFFECTIVENESS
OF MEDICINES: LINKING HEALTH
CARE OUTCOME DATA TO
MEDICINE DATA



Guy's and St Thomas'
NHS Foundation Trust

IMPROVING HEALTH OUTCOMES
FOR CHILDREN AND YOUNG
PEOPLE USING DATA SCIENCE
AND AI



ACCELERATING AI
PIPELINES TO
ACCELERATE SCIENCE

Upcoming Placement



**Hewlett Packard
Enterprise**

INNOVATION PLACEMENT
IN QUANTUM COMPUTING

OPENS IN JANUARY 2025

www.dirac.ac.uk/training

DiRAC-HPC

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