Science and Technology Facilities Council

Scientific Computing

Placement Opportunities for 2024

Scientific Computing, STFC are inviting in-field placement applications from research software and data engineering professionals within industry and universities who would like to enhance their practical and technical skills in AI for Science.

This placement is supported through an EPSRC funded project called 'Blueprinting AI for Science at Exascale (BASE-II) and aims to develop a set of blueprints for AI for Science applications at Exascale.

The main objective of each placement is to spend time, with the Scientific Machine Learning Group (SciML) at Scientific Computing based at STFC, Rutherford Appleton Laboratory, and gain ML, data science, and data engineering skills to take back to their organisation or for their own research. During the placement, SciML will provide coaching on a broad range of machine learning skills as follows:

- Basic Carpentry Skills covering ML for Science, platforms for AI and computational science, research data engineering/management.
- Computational Science and AI: Surrogate models for simulations, generative models for computational sciences, and physics informed neural networks (PINNs), and
- Advanced AI for Science: AI patterns for science and engineering, AI benchmarking, latent-space modelling, bridging the gap between experimental and simulated datasets, HPC-AI converged models, AI at the Edge, data denoising, domain-specific ML models, and large-language models (LLMs) for science.

This placement is non-contractual with STFC and as such no transfer of employment will be made to STFC as the host organisation. All placements will take place at STFC, Rutherford Appleton Laboratory, Didcot, Oxon, OX11 0QX. We will consider placements for a minimum of 3 months and a maximum of 6 months. In each case placements will be regarded as visiting scientists in STFC, with access to STFC systems to conduct day to day work within the SciML group.

Essential Skills required for this placement:

- Currently working within the discipline of Data Science / Engineering role,
- Good programming skills on Python and Linux, and
- Strong technical background in computer science or electrical engineering or a relevant area, e.g., mathematics, materials sciences, physics, chemistry or life sciences or computationally driven areas of sciences (including environmental sciences) or equivalent experience in other areas.

To apply, please submit your expression of interest form available here

by 5pm, Thursday 30th November 2023

BASE-II

Blueprint AI For Science at Exascale