

Faculty Name:

Simon Billinge

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Lab:

Billinge group

Project Title:

AI agents for real-time x-ray data reduction protocols

Description:

The project will develop a flexible, configurable set of data analysis “agents” for x-ray data reduction from materials science experiments, operating in the the NSLS-II software ecosystem, that do granular tasks but can be chained together to do more complex tasks. Such software components, or agents, will allow users to quickly build bespoke analysis pipelines that allow them to compare datasets from different sample and different runs, optimize analysis conditions, take scaled differences and so on, on a time-scale that they can make meaningful decisions about future measurements based on results from previous ones. We will explore the use of ML and AI in these tools as the software develops.

Location of Research:

Hybrid (both Remote and On Site)

of hrs/week:

10

Department/Program:

Applied Physics and Applied Mathematics

Eligibility:

BS, First Year, BS, Second Year

To apply, please contact:

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