

Collaborative Research in Machine Learning on the African Continent

Friday, September 29, 2023 9:00 AM (25 minutes)

After a series of training in Machine Learning (ML), we developed a group of about 15 researchers across different countries in Africa working together online to use ML tools in the study of materials and compounds. In particular, the group is developing ML models for:

- a) determining whether a material is an insulator or a conductor
- b) predicting the nature (direct/indirect) of band gaps of semiconductors with little computation
- c) searching for hard materials
- d) finding compounds with very high thermal conductivities

The research group shares computational resources (hardware and software) as well as human expertise through its online weekly meeting and is open to anyone interested. Some of our scientific results will be presented as well as benefits and challenges of the team.

Abstract Category

Materials Physics

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