Workforce Development and Training for RandNLA

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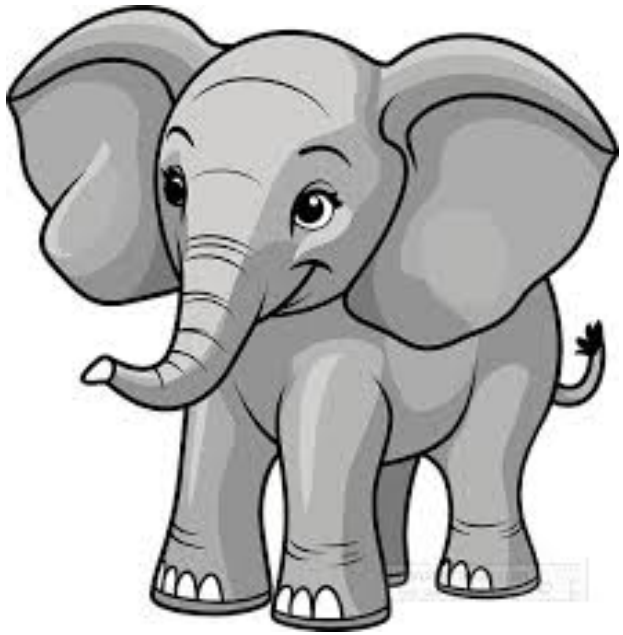
Goal of the discussion

- RandNLA exists at the intersection of a wide range of fields (HPC, Statistics, Math, TCS, Domain Sciences)
- As field matures urgent question about who grows and maintains the infrastructure in the field
- Goal: Come up with proposal for OAC on how to fund training programs in the field.

The elephant in the room

What new requirements of curriculum are brought about with the inclusion of AI?

1. AI allows people to quickly build competency in a wide-range of fields that are potentially far from their training
2. This means that working in interdisciplinary teams and thinking about wider ranges of problems will be far more important for future student success



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- Should be more emphasis on teamwork and communication via capstone projects
- RandNLA can be the driving force that ties the linear algebra and probability courses

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- We should focus on building up our own application (Scientific Machine Learning) where Randomized Linear Algebra drives the success

Recommendations

1. Encouraging universities to structure curriculum to be more data science focused than engineering (linear algebra and probability)

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2. Encourage computational curriculums at universities to encourage more communication and projects
3. To encourage people to use the software we should focus on one application and showing how RandNLA can transform that application