

BD2K – Algorithms Mathematical Approaches



Common Themes

- Algorithms
 - Data dimension reduction
 - Multivariate
 - Machine learning
 - Deep learning
 - Sparse / regularized regression / compressive sensing
 - Algorithms to analyze networks
- Training
 - Beginner to expert needed
 - Collaborations between biomedical field and mathematics / statisticians

What Works/ Challenges?

- What works
 - Online courses, webinars
 - University courses online, especially with case studies (e.g. for med students)
 - R25s
 - Competitions
 - Training/testing datasets, learn what algorithms work best, teams working on data
 - Really good professors!
 - Feedback
- Challenges
 - Who are we targeting in training?