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- Research
  - Bioinformatics
  - Algorithms
  - Data mining
- Teaching
  - cs9832a(cs4463a): Topics in Bioinformatics

cs9832a(cs4463a): Topics in Bioinformatics; topics are drawn from the following lists:

- Pairwise sequence alignment with affine gap penalty.
- Multiple sequence alignment with affine gap penalty.
- Tree comparison algorithms.
- RNA structure alignment algorithms.
- Neighbour-joining algorithm
- Hidden Markov models
- Sequence assembly
- RNA secondary structure prediction by minimum energy folding.
- Protein peptide de novo sequencing.
- Normalized similarity and distance

- Bioinformatics

- Protein peptide and glycan structure determination
- Protein domain-peptide binding analysis
- RNA structure comparison and inference
- RNA-RNA interaction structure comparison, inference, and prediction

- Algorithms

- Tree similarity algorithms
- Normalized similarity computation