• Research
  – Bioinformatics
  – Algorithms
  – Data mining

• Teaching
  – cs9832a: Topics in Bioinformatics
cs9832a: 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