

# Genomics and Bioinformatics Tools

CSE 550 – Fall 2017

Mondays and Wednesdays: 6:15pm – 7:30pm

Lab: Online

A course for CSE, Biology and Chemistry students. Pre-requisites - Junior, Senior, or Graduate standing in CSE, Biology, or Chemistry. Further your career prospects with the knowledge of how to efficiently use common Genomics and Bioinformatics tools, in this age of “OMICS”.

## Topics to be covered:

Genome browsers; Sequence database search; Pairwise and multiple sequence alignment; Gene finders; Building phylogenetic trees and phylogenetic analysis; Predicting and analyzing RNA secondary structure; Protein structure visualization; Primer designing; Introduction to Linux basics.

## Instructor – Dr. Sourav Roy

PhD – Genetics, Genomics and Bioinformatics;  
MS – Bioinformatics; M.Sc – Zoology (Genetics).

Assistant Researcher

Department of Entomology and  
Institute for Integrative Genome Biology,  
University of California Riverside.

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TTTGCTAAACAAGGTTTATAAAATAGTTG
AAATAATAGAAAACAACTAAAATGAAAT
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AATAAGATATCTTATAATTATTGTATGACT
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ACGGTTTTTTTGACTCATGTAGATGGATC
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TATTCATTCCACTTGTTTGAGTCGGGGT
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