

CPR/SE 492 Bi-Weekly Report MAY 15-10 Weeks 5-6

Advisors: Ruchi Chaudhary

Client: Gordon Burleigh

Members (roles): Ben -- Team leader
 Cole -- Team Key Concept Holder
 Ian -- webmaster
 Paul -- communication leader

Project Title: Gene Tree Improvement Tool / TreeFix

Bi-Weekly Summary

We are still continuing with our testing and solving problems as they are occurring. We have also been discussing possible extensions that will benefit our project. We have talked to our client and asked for some extra test cases.

Meeting notes:

2/10 Advisor Meeting

Duration: 5 mins **Members Present:** All

Purpose and Goals:

Meet with advisor to update where we are with testing.

Achievements:

We updated Ruchi with where we were with testing the algorithm. Answered a few quick questions that she had.

2/12 Group Meeting

Duration: 2 hrs **Members Present:** All

Purpose and Goals:

Fix MulRF cost algorithm to incorporate species trees with nonbinary nodes and test algorithm.

Achievements:

We fixed the MulRF algorithm to handle trees with nonbinary nodes. We also verified some test cases by hand. We also planned to split up test cases amongst of the group members to run and report back next meeting

2/17 Advisor Meeting

Duration: 10 mins **Members Present:** All

Purpose and Goals:

Meet with advisor to update where we are.

Achievements:

We updated Ruchi with where we were with testing the algorithm

2/19 Group Meeting

Duration: 2 hrs **Members Present:** All

Purpose and Goals:

Discuss test cases and their results.

Achievements:

Found test cases with incorrect results, able to identify the error but were unable to resolve it during the meeting.

Pending issues

1. Contact Gordon again for test cases and input into our program

Plans for next week

Paul - Test the fly data set in Treefix

Cole - Refactoring MulRF algorithm to reduce runtime

Ben - Start an outline for the final document, so we can get a rough draft started

Ian - Produce tree-output to test in oracle w/ data sets provided by Ruchi.

Individual Contributions

Ben Streit -Helped identify cause of incorrect test case values

Cole Poffenberger - Looked at advisor proved test sets, provided detailed output from the compute cost function for Ian to process with an oracle.

Ian Ray - Wrote an Oracle program to run over tree-outputs. Checks if TreeFix is producing correct MulRF results. Also tested the oracle results to ensure the oracle is functioning properly.

Paul Leichty - attended all meetings, worked with group to identify bug in our code by identifying inconsistencies in test case data.