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Senior Project II — Fall 2017

Professor Jianting Zhang

Report for Sept. 12

Our project intends to first solve the Graph Isomorphism Problem and then use GPU programming to parallelize the solution for a significant performance improvement. The project's progress should proceed as follows. Each week will be accompanied with a report detailing the actual progress.

- September 12th — This report, along with the data set that will be used to test our solution, both for correctness and for performance benchmarks.
- September 19th — Report on plans to implement our solution, as well as progress on development of the solution itself.
- September 26th — Completion of program to match
- October 3rd —
- October 10th — Verification that solution works on data set provided, begin planning GPU implementation.
- October 17th — Begin work on GPU implementation, with focus on optimizing speed of mapping nodes from one graph to another.
- October 24th — Continue working on GPU implementation, shifting focus to comparing connections between nodes and checking for isomorphism.
- October 31st — Report on bugs identified and plans to fix them.
- November 7th — Completion of GPU implementation.
- November 14th — Designing of GUI/front end.
- November 21st — Continuing work on front end.
- November 28th — Connection of front end to back end.
- December 5th — Completion of project, final testing.
- December 12th — Completion of final report.