## FINAL PROJCET

## MORAN KIM

DEPARTMENT OF MATHEMATICS, EWHA WOMANS UNIVERSITY, SOUTH KOREA *E-mail address*: moran.kim.9@qmail.com

In my final project, I want to do implementing a circle packing in 2 dimension. I studied about it when I undergraduate student. But I did not implemented it myself. I want to try it as my final project. And want to deepen my understanding about the proof of convergence of a method, used to construct a circle packing. I will follow the paper [ A circle packing algorithm] written by Charles R. Collins and Kenneth Stephenson. This paper published at "Computational Geometry" in 2003. In this paper they introduced the "Uniform Neighbor Method" to get a circle packing in 2D. The proof of the convergence using UNM is not fully described. Therefore, I want to set my goal of this project as, 1) Summarizing the algorithm(20%), 2) Implementation for circle packing algorithm using UNM method(50%), 3) Prove the convergence(20%). and if necessary(if possible)(10%), I will add a contribution to this UNM method.