

Jacob Leboeuf
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Dr. Haim Levkowitz
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Summary

This article discusses an algorithm developed for creating accurate relative curves and surfaces based off of a newly introduced discrete spring model. The accuracy of the curves and surfaces rely on the premise of the minimal local variation within the created curvature. The created spring model uses a linear spring and takes its length to represent the curvature radius, assigning energy to the differences of the lengths of nearby strings. The authors noted that the usage of the model allowed the process of generating the algorithm to be fairly simple, as the interpretation of its geometry allowed fair surfaces to be developed without significant setbacks or issues. However, they look to continue to prove the convergence of the algorithm in the future, and plan on applying the model to other applications to help solve the fairing problem elsewhere. Given that the article was developed in 1999, it would be ideal for the authors to have more proof of success with their algorithm, as well as overall improvements upon it in general.