

Algorithmic Folding
In-Depth Homework Assignment Project Report
End-to-End Vertex Unfolding

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1 Introduction

- why is unfolding important
 - different kinds of unfoldings (edge unfolding & general unfolding and their limits)

1.1 Problem Statement

- goal
 - extend code on facet path to cover all cases
 - unfold the triangles and find a rotation so that no overlaps happens and the vertices are aligned

2 Fundamentals

2.1 Unfoldings

- what is unfolding - kinds of unfolding - limits

2.2 Vertex Unfolding

- what is vertex unfolding - example of a simple shape and its vertex unfolding
- known limits of vertex unfolding (always possible?)

3 Evaluation

- evaluate algorithm (benchmark?)
- test limits (first: cube with different triangulations)