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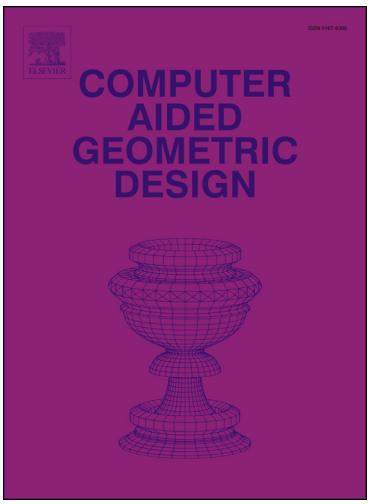

Functional Data Approximation on Bounded Domains using Polygonal Finite Elements

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Highlights

- We fit data using quadratic serendipity finite elements on polygonal meshes.
- Two greedy algorithms are proposed to generate Voronoi meshes for adaptive fitting.
- An L2-optimization is tailored to further improve the fitting result.
- Our method is efficient in modeling features/discontinuities in data approximation.

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