

University of Groningen

Arbitrary topology meshes in geometric design and vector graphics

Hettinga, Gerben

DOI:
[10.33612/diss.192301532](https://doi.org/10.33612/diss.192301532)

IMPORTANT NOTE: You are advised to consult the publisher's version (publisher's PDF) if you wish to cite from it. Please check the document version below.

Document Version
Publisher's PDF, also known as Version of record

Publication date:
2021

[Link to publication in University of Groningen/UMCG research database](#)

Citation for published version (APA):
Hettinga, G. (2021). *Arbitrary topology meshes in geometric design and vector graphics*. [Thesis fully internal (DIV), University of Groningen]. University of Groningen. <https://doi.org/10.33612/diss.192301532>

Copyright

Other than for strictly personal use, it is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), unless the work is under an open content license (like Creative Commons).

The publication may also be distributed here under the terms of Article 25fa of the Dutch Copyright Act, indicated by the "Taverne" license. More information can be found on the University of Groningen website: <https://www.rug.nl/library/open-access/self-archiving-pure/taverne-amendment>.

Take-down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Downloaded from the University of Groningen/UMCG research database (Pure): <http://www.rug.nl/research/portal>. For technical reasons the number of authors shown on this cover page is limited to 10 maximum.

PROPOSITIONS

ARBITRARY TOPOLOGY MESHES IN GEOMETRIC DESIGN AND VECTOR GRAPHICS

GERBEN JAN HETTINGA

1. By using geometric strategies instead of parametric, topological restrictions can be subverted.
-Chapters 4 & 8
2. Generalised barycentric coordinates are essential for multisided patch constructions.
-Chapters 5 & 8
3. Multisided patches can be rendered just as easily as regular patches.
-Chapter 5
4. Image vectorisation is an ill-posed problem.
-Chapter 6
5. Procedural noise functions and vector graphics are a great match.
-Chapter 7
6. Arbitrary topology gradient meshes allow for more freedom in creating gradient meshes.
-Chapter 8
7. Extracting the right set of features is essential in obtaining a good image vectorisation.
-Chapter 9
8. Big results require big ambitions.
-Heraclitus