

UNIVERSITÄT DES SAARLANDES

BACHELOR THESIS

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# Data Selection for Nonlinear Diffusion Inpainting in Image Compression

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for the degree of Bachelor of Science*

*in the*

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Department of Computer Science

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# Declaration of Authorship

I, Daniel Gusenburger, declare that this thesis titled, “Data Selection for Non-linear Diffusion Inpainting in Image Compression” and the work presented in it are my own. I confirm that:

- This work was done wholly or mainly while in candidature for a research degree at this University.
- Where any part of this thesis has previously been submitted for a degree or any other qualification at this University or any other institution, this has been clearly stated.
- Where I have consulted the published work of others, this is always clearly attributed.
- Where I have quoted from the work of others, the source is always given. With the exception of such quotations, this thesis is entirely my own work.
- I have acknowledged all main sources of help.
- Where the thesis is based on work done by myself jointly with others, I have made clear exactly what was done by others and what I have contributed myself.

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# *Abstract*

Faculty of Mathematics and Computer Science  
Department of Computer Science

Bachelor of Science

**Data Selection for Nonlinear Diffusion Inpainting in Image Compression**

by Daniel Gusenburger



# *Acknowledgements*





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*dedicated to my cat*



## **Chapter 1**

# **Selection of interest points**