Gene Set Enrichment Analysis on GDSC Datasets using GeneTrail

by

Francesco Georg Schmitt

Bachelor Thesis

Center for Bilinformatics Faculty of Mathematics and Computer Science Department of Computer Science Saarland University

Supervisor

Prof. Dr. Hans-Peter Lenhof

Advisor

Kerstin Lenhof, Lea Eckhart

Reviewers

Prof. Dr. Hans-Peter Lenhof tbd

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Abstract

Gene Set Enrichment Analysis on GDSC Datasets using GeneTrail by Francesco Georg Schmitt

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Acknowledgements

Thx Mom+Dad < 3

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CHAPTER 1

This is a Chapter title

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More in Chapter 2.

Chapter 2

MOTIVATION

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FIGURE 2.1: Example of a figure

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Table 2.1: Example of a table

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BIBLIOGRAPHY

[1] N. G. De Bruijn. Lambda calculus notation with nameless dummies, a tool for automatic formula manipulation, with application to the church-rosser theorem. INDAG. MATH, 34:381-392, 1972.

Appendix A

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Table A.2: Example of a table

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