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The Effects of Visual and Design Features on the Perception of Correlation in Scatterplots

A thesis submitted to the University of Manchester for the degree of
Doctor of Philosophy
in the Faculty of Science and Engineering

2024

Gabriel Strain
Department of Computer Science

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Abstract

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Literature Review

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General Methodology

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Adjusting the Opacities of Scatterplot Points Can Affect Correlation Estimates

Chapter 5

Adjusting the Sizes of Scatterplot Points Can Correct for a Historic Correlation Underestimation Bias

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Interactions of Opacity and Size Adjustments

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Scatterplots Optimised for Correlation

Perception Affect Beliefs About Correlations and Attitudes Towards Trivial Topics

Chapter 8

Conclusion

Appendices

Appendix A

First appendix

A.1 Section in Appendix

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