

Team 32

Casper Collet and Chu Li

**Abstract:**

What causes couples to divorce? Imagine if machine learning could predict divorce by analyzing a few key questions! Are some relationship values more crucial than others, or does it not truly matter? This topic opens up fascinating avenues for exploration and research. Understanding the predictive capabilities of machine learning in this context could empower couples with valuable insights, helping them enhance their relationships and significantly reduce the likelihood of divorce.

Course: Data Science Lab (ECB3DSL), Academic year 2024/2025

Team: 32

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Word count:

**Statement of Originality**

We, the aforementioned students, herewith declare to have written this document and that we are responsible for the content of it. We declare that the text and the work presented in this document is original and that no sources other than those mentioned in the text and its references have been used in creating it.

Utrecht University School of Economics is responsible solely for the supervision of completion of the work, not for the content.

**Disclosure Statement**

In this project, we have made use of the following Generative AI tools:

We have used these tools for:

**Division of Work**

We, the aforementioned students, herewith declare that we have divided the work on this project and this project paper as stated in the following table:

|  |  |
| --- | --- |
| Section and Content | Name and Student Number |
| 1 Introduction | All students |
| 2 Data | [Student Name & Number 1] |
| … | … |
| 5 Conclusions | All students |

Signatures

[copy scans of your signatures here, add your student name and number]

# Introduction

[You should use this template for the paper of your research project. Convert your paper into a single PDF-file before submitting it.]

[This document contains a proposal for the structure of your research paper; it represents the typical structure of research papers. You do not have to follow exactly this structure – depending on your specific research project you might want to adjust it.]

[You have to explain clearly, who did what in the research project, and who wrote which part for the research paper. Fill this information into the table on the previous page. The allocation of work has to be balanced. Contact your supervisor to check that your plan for allocating the work is balanced **at the start** of your project! The allocation of work may change over the course of your project due to unforeseen events – in that case, contact your supervisor to check if it still remains balanced! The empirical approach typically has to be decided upon by you jointly, even if only one of you is actually implementing it. Hence, this part also typically has to be written by you jointly. All student are jointly responsible for the introduction and conclusions.]

[Your introduction section should discuss the following things: What is the overall topic and what is your specific research question within the topic? Why does it matter, i.e. what do you contribute to the societal and scientific debate (link to the literature!)? This also implies that you give a very short overview over your main findings already here. How do you achieve this (i.e. brief overview over your methodology)?]

# Data

[Describe your data set and explain which preparations you did, e.g. variable definitions, etc. – focus on what is necessary to understand your research project.]

# Descriptive Analyses

[Provide those descriptive analyses, which are necessary to understand the relevant features of your data that matter for the research project]

# Empirical Approach

[Explain the empirical approach of your project – how this should look like strongly depends on your specific type of project]

# Results

[Show, explain, and discuss your results]

# Conclusion

[Conclude: What do you find? How does that contribute to the research question? How does that contribute to the relevant scientific and societal debate? What remains open?]

# References

Last Name 1, First Name 1, and Last Name 2, First Name 2 (year): “Title”, Journal Name, Volume(Issue):PageX-PageY.

# Appendix

[The appendix is optional and you do not necessarily need it. How to decide whether to put something in the appendix or main text? That is a subjective decision. Broadly speaking, the main text should be self-contained and everything that matters for the main line of arguments should be in the main text. The appendix instead is for smaller arguments and checks that are not necessary for the main story of your project.]