

Anonymization of Data MSDS 7349 Project Draft

Alex Frye, Michael Smith, and Lindsay Vitovsky

Abstract—The global challenge of how to truly anonymize data continues to evolve, as well as confound those who attempt to address it. This paper critically reviews an array of anonymization theories and techniques, applying them to real-world situations, with the goal of helping others weigh the cost, benefit, and, most importantly, the ethics of anonymizing data.

Index Terms—

1 INTRODUCTION

IS it possible to truly anonymize data? The community of those working to improve the privacy of data is not trivial; many have attempted and succeeded at expanding the capabilities to stretch the proverbial distance between entities and the data being collected on them. However, privacy is relative. It is only as strong as the inability of those working to compromise it. An instance of data, with seemingly no personally identifiable information, might actually be able to be used to provide a trail back to its original source.

Alongside of this is the usefulness of the data. To what degree is the utility of the data conceded in the interest of privacy? Is the collection and storage of data worth the end result, in relation to the danger the original user faces?

We set out to explore and provide answers to these questions. There are certainly many resources already available to review, and techniques that have been tested. Along with a vigorous review of existing research, we also will 1) critically review a selection of anonymized data sets for vulnerabilities, 2) consult with a company currently undertaking a significant new service that will demand the collection of anonymized data, including Personally Identifiable Information and private health information, and 3) test a series of anonymizing techniques on sample data sets to test their efficacy.

1.1 Subsection Heading Here

placeholder

1.1.1 Subsubsection Heading Here

placeholder

2 CONCLUSION

Where our amazing conclusion will go.

APPENDIX A

placeholder

APPENDIX B

placeholder

ACKNOWLEDGMENTS

The authors would like to thank...

The IEEE for this template, TRANS-JOUR.DOC

REFERENCES

- [1] H. Kopka and P. W. Daly, *A Guide to L^AT_EX*, 3rd ed. Harlow, England: Addison-Wesley, 1999.