## **Accepted Manuscript**

Statistical science in the world of big data

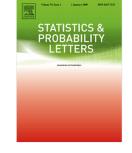
Nancy Reid

PII: S0167-7152(18)30094-4

DOI: https://doi.org/10.1016/j.spl.2018.02.049

Reference: STAPRO 8171

To appear in: Statistics and Probability Letters



Please cite this article as: Reid N., Statistical science in the world of big data. *Statistics and Probability Letters* (2018), https://doi.org/10.1016/j.spl.2018.02.049

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Statistical science in the world of big data

Nancy Reida,\*

 $^aDepartment$  of Statistical Sciences, University of Toronto, 100 St. George St., Toronto  $M5S\ 3G3\ Canada$ 

Abstract

This essay considers the role of the statistical sciences in the world of big data, data science, machine learning, and artificial intelligence, with a decidedly Canadian slant.

Keywords: data science, inference, machine learning

2010 MSC: 62-07, 62-02, 68-02

1. Introduction

From January to June 2015, a series of twelve workshops took place across Canada, as part of a six-month thematic program at the Fields Institute for Research in the Mathematical Sciences, organized by the Canadian Statistical Sciences Institute. Most of the activity was in Toronto at the Fields Institute (Fields, 2015), which also provided the main funding. Allied workshops were held at the Pacific Institute for Mathematical Sciences in Vancouver, the Centre de Recherches Mathématiques in Montreal, and the Atlantic Association for Research in the Mathematical Sciences in Halifax. I chaired the program organizing committee and the international advisory committee, but the suc-

cess of the effort is really due to the hard work and varied contributions of the

 $<sup>^{\</sup>dot{\approx}} \text{Supported}$  by the Natural Sciences and Engineering Research Council of Canada.

<sup>\*</sup>Corresponding author

Email address: reid@utstat.utoronto.ca (Nancy Reid )

URL: www.utstat.toronto.edu/reid (Nancy Reid )

## Download English Version:

## https://daneshyari.com/en/article/7548507

Download Persian Version:

https://daneshyari.com/article/7548507

<u>Daneshyari.com</u>