Gottfried Wilhelm Leibniz Universität Hannover
Institut für Verteilte Systeme
Distributed Computing & Security Group

Master thesis
Informatics (M.Sc.)

Anomaly detection in streaming data using autoencoders

Student:	B.Sc. Bin Li
First Supervisor:	Prof. Dr. Eirini Ntoutsi
Second Supervisor:	Prof. Dr. Wolfgang Nejdl
Date:	March 12, 2018

Declaration of Authorship

I hereby certify that this thesis has been composed by me and is based on my own work, unless stated otherwise. No other person's work has been used without due acknowledgement in this thesis. All references and verbatim extracts have been quoted, and all sources of information have been specifically acknowledged.

Hanover, March 12, 2018

B.Sc. Bin Li

Contents

List of Figures

List of Tables

Codeverzeichniss

Chapter 1

Introduction

Der Reiseführer hat eine sehr schöne Theorie zur Komplexität des Universums:

Chapter 2

Related works

2.1 Anomaly detection

2.2 Autoencoder for anomaly detection

2.3 Streaming data anomaly detection