# UNIVERSITY OF MILAN FACULTY OF SCIENCE AND TECHNOLOGY

#### DEPARTMENT OF COMPUTER SCIENCE



Master degree in Computer Science

# ALGORITHMS FOR MASSIVE DATASETS FINAL REPORT ABOUT RECOMMENDER SYSTEM

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CONTENTS 1

This report is made up of 8 chapters. In the **Chapter 1** we give at the reader a general view of what is a recommender system and where we can find it. **Chapter 2**, we start to discuss about the development setup for the project. Then, in the **Chapter 3** we focus on the dataset, how is composed and we explore the data. Later, in the **Chapter 4** we explain the recommender system. the different approaches and the mechanisms behind. In order to evaluate the project developed there are some notion about scalability and complexity in the **Chapter 6**. Consequently, we summarize the aspects and the results obtained during the various experiments in the **Chapter 7**. Finally there is the conclusion in last **Chapter 8**.

#### Introduction

A recommender system is used everywhere nowadays. Indeed all big companies are pushing in these systems because they can increase the sells about their product, e.g., when we are scrolling a product on Amazon, then they show a list of recommendation based on the item selected.

# Chapter 2 Environment setup

Dataset: A look inside

# Chapter 4 Recommender system

# Creation of a Content-based Recommender system

Chapter 6
Scalability and complexity

Results and experiments

## Conclusion