Preface

Concept discovery is a subdomain of Knowledge Discovery (KDD) that uses human-centered techniques such as Formal Concept Analysis (FCA), Topic Modeling, Visual Text Representations, Conceptual Graphs etc. for gaining insight into the underlying conceptual structure of the data. Traditional machine learning techniques are mainly focusing on structured data whereas most data available resides in unstructured, often textual, form. Compared to traditional data mining techniques, human-centered instruments actively engage the domain expert in the discovery process.

This volume contains the papers presented at the 3rd International Workshop on Concept Discovery in Unstructured Data (CDUD 2016) held on July 18, 2018 at the National Research University Higher School of Economics, Moscow, Russia. This workshop welcomes papers describing innovative research on data discovery in complex data. It particular, it provides a forum for researchers and developers of text mining instruments, whose research is related to the analysis of linguistic and text data.

This year 15 papers had been submitted. Each submission has been reviewed, at least, by 2 program committee members. Seven papers have been accepted for regular publication in the proceedings, and three more submissions for publication as project proposals or abstracts.

Papers included in this volume cover a wide range of topics related to text mining and structures for text representation: text navigation, statistical learning models, automatic author or field identification in texts, among others.

An invited talk given by Natalia Loukachevitch from Moscow State University has opened the workshop program. She has surveyed modern tasks and approaches in sentiment analysis of Twitter messages.

Our deep gratitude goes to all the authors of submitted papers, as well as to the Program Committee members for their commitment. We also would like to thank our invited speaker and our sponsors: National Research University Higher School of Economics (Moscow, Russia), Russian Foundation for Basic Research, and ExactPro. Finally, we would like to acknowledge the EasyChair system which helped us to manage the reviewing process.

July 18, 2016 Moscow Jaume Baixeries Dmitry I. Ignatov Dmitry Ilvovsky Alexander Panchenko