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Text, Speech, and Dialogue

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Preface

The annual conference on Text, Speech and Dialogue (TSD), which originated in 1998, constitutes a recognized platform for the presentation and discussion of state-of-the-art technology and recent achievements in natural language processing. It has become a broad interdisciplinary forum, interweaving the topics of speech technology and language processing. The conference attracts researchers not only from Central and Eastern Europe but also from other parts of the world. Indeed, one of its goals has always been to bring together NLP researchers with various interests from different parts of the world and to promote their mutual cooperation. One of the ambitions of the conference is, as its title says, not only to deal with dialogue systems but also to improve dialogue between researchers in the two areas of NLP, i.e., between ‘dialogue’ and ‘speech’ people. Moreover, the TSD 2015 conference was partially organized at the new learning and research center of the University of West Bohemia in Plzeň (Pilsen), which was opened last year. This center, named NTIS (New Technologies for the Information Society), is a European project under the Operational Program ‘Research and Development for Innovations,’ aiming at establishing a European Center of Excellence at the Faculty of Applied Sciences of the University of West Bohemia. A new building was constructed for use by NTIS, housing offices and laboratories with total area of 12 thousand sq. meters. However, top-level research must always be coupled with education. Thus, new lecture rooms and laboratories for students’ use were built there and the project goal is to improve the quality and to increase the number of graduates choosing to continue their careers in research and development.

The TSD 2015 conference was the 18th event in the series of the International Conferences on Text, Speech and Dialogue supported by the International Speech Communication Association (ISCA) and the Czech Society for Cybernetics and Informatics (ČSKI). The conference was held partially in the Parkhotel and Congress Center Pilsen, the largest hotel center in West Bohemia, with a capacity for 2000 people, and partially directly in the above-mentioned new building of the Faculty of Applied Sciences of the University of West Bohemia in Pilsen on September 14–17, 2015, immediately after the famous conference Interspeech 2015 in Dresden. Like its predecessors, TSD 2015 highlighted to both the academic and scientific world the importance of text and speech processing and its most recent breakthroughs in current applications. Both experienced researchers and professionals, as well as newcomers to text and speech processing, interested in designing or evaluating interactive software, developing new interaction technologies, or investigating overarching theories of text and speech processing, found in the TSD conference a forum to communicate with people sharing similar interests.

This volume contains a collection of submitted papers presented at the conference. Each of them was thoroughly reviewed by three members of the conference reviewing team consisting of more than 60 top specialists in the conference topic areas. A total of 67 accepted papers out of 138 submitted, altogether contributed by 152 authors and

co-authors, were selected by the Program Committee for presentation at the conference and for publication in this book. Theoretical and more general contributions were presented in common (plenary) sessions. Problem-oriented sessions as well as panel discussions then brought together specialists in narrower problem areas with the aim of exchanging knowledge and skills resulting from research projects of all kinds.

Last but not least, we would like to express our gratitude to the authors for providing their papers on time, to the members of the conference reviewing team and the Program Committee for their careful reviews and paper selection, and to the editors for their hard work preparing this volume. Special thanks are due to the members of the Local Organizing Committee for their tireless effort and enthusiasm during the conference organization. We hope that you benefited from the event and that you also enjoyed the social program prepared by members of the Local Organizing Committee.

July 2015

Václav Matoušek

Organization

TSD 2015 was organized by the Faculty of Applied Sciences, University of West Bohemia in Plzeň (Pilsen), in cooperation with the Faculty of Informatics, Masaryk University in Brno, Czech Republic. The conference website is located at: <http://www.kiv.zcu.cz/tsd2015/> or <http://www.tsdconference.org>.

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About Plzeň (Pilsen)

The new town of Pilsen was founded at the confluence of four rivers – Radbuza, Mže, Úhlava, and Úslava – following a decree issued by the Czech king, Wenceslas II. He did so in 1295. From the very beginning, the town was a busy trade center located at the crossroads of two important trade routes. These linked the Czech lands with the German cities of Nuremberg and Regensburg.

In the fourteenth century, Pilsen was the third largest town after Prague and Kutná Hora. It comprised 290 houses on an area of 20 ha. Its population was 3,000 inhabitants. In the sixteenth century, after several fires that damaged the inner center of the town, Italian architects and builders contributed significantly to the changing character of the city. The most renowned among them was Giovanni de Statia. The Holy Roman Emperor, the Czech king Rudolf II, resided in Pilsen twice between 1599 and 1600. It was at the time of the Estates revolt. He fell in love with the city and even bought two houses neighboring the town hall and had them reconstructed according to his taste. Later, in 1618, Pilsen was besieged and captured by Count Mansfeld's army.

Many Baroque-style buildings dating to the end of the seventeenth century were designed by Jakub Auguston. Sculptures were made by Kristian Widman. The historical heart of the city – almost identical to the original Gothic layout – was declared a protected historic city reserve in 1989.

Pilsen experienced a tremendous growth in the first half of the nineteenth century. The City Brewery was founded in 1842 and the Škoda Works in 1859. With a population of 175,038 inhabitants, Pilsen prides itself on being the seat of the University of West Bohemia and Bishopric.

The historical core of the city of Pilsen is limited by the line of the former town fortification walls. These gave way, in the middle of the nineteenth century, to a green belt of town parks. Entering the grounds of the historical center, you walk through streets that still respect the original Gothic urban layout.

You will certainly admire the dominant architectonic features of the city. These are mainly the Church of St. Bartholomew, the loftiness of which is accentuated by its slim church spire. The spire was reconstructed into its modern shape after a fire in 1835, when it was hit by a lightning bolt during a night storm.

The placement of the church within the grounds of the city square was also rather unique for its time. The church stands to the right of the city hall. The latter is a Renaissance building decorated with frescos from 1908–12. You will certainly also notice the Baroque spire of the Franciscan monastery.

All architecture lovers can also find more hidden jewels, objects appreciated for their artistic and historic value. These are burgher houses built by our ancestors in the styles of the Gothic, Renaissance, or Baroque periods. The architecture of these sights was successfully modeled by the construction whirl of the end of the nineteenth century and the beginning of the twentieth century.

Thanks to the generosity of the Gothic builders, the town of Pilsen was predestined for free architectonic development since its very coming into existence. The town has therefore become an example of a harmonious coexistence of architecture both historical and historicizing.

In 2015, Pilsen became the European Capital of Culture. The town is open to fresh cultural impulses and welcomes artists from various domains and corners of the world.

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