

**P–KAR 2012**

**PLACE-RELATED KNOWLEDGE ACQUISITION  
RESEARCH**

**Proceedings of the International Workshop**

Monastery Seeon, Germany

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## Preface

This volume contains the proceedings of the *International Workshop on Place-related Knowledge Acquisition Research* (P-KAR 2012), held on August 31, 2012 in Monastery Seeon, Germany, in conjunction with the Spatial Cognition conference 2012.

*Place* has become a hot topic in GIScience: *place* is important in human cognition and communication, and hence, is a high priority for human-computer interaction. But *place* is also a challenging concept to model, reason with, and analyze in information systems, because of its fluency with context shifts, and its under-specification.

Place-related Knowledge Acquisition Research is using the concept of geographic place with the goal of building smarter services and integrating heterogeneous data. Thus, this workshop is built around the following challenge:

*Achieve automatic estimation of the location of things or events based on verbal or graphical descriptions, or photographs, or a combination of them.*

Imagine, for example, a geo-spatial service the interface of which allows for user interaction using place-based queries, references, or descriptions. Such a service may be able to deal with verbal descriptions, such as ‘the bar at the top end of Federation Square’, or with pictorial descriptions, where users sketch the location of said bar. For true interaction, the service needs to be able to *understand* these kinds of descriptions for both interpreting input, and for producing output. It should be able to estimate the location of a feature (in the real world) based on these descriptions, and to produce relevant descriptions of locations of features in response to user input.

The aim of the workshop was to bring together researchers from computational linguistics, data mining, artificial intelligence, geographic information science, and related disciplines, with a common interest in tackling this challenge. This volume contains their contributions in the form of peer-reviewed full papers or extended abstracts.

The P-KAR 2012 International Workshop featured a keynote talk, two presentation sessions of the accepted papers and abstracts, and a break out session where groups formed to discuss issues that emerged from the paper presentations, before conclusion. We would like to thank the Program Committee for their time, effort, and quality work in reviewing the papers, as well as all the authors for submitting their work for consideration. We are also grateful to our keynote speaker—Ross Purves (University of Zurich, Switzerland)—for accepting our invitation to participate in the workshop and address the participants, and everyone else that contributed to the workshop’s success.

August 2012

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