

Foreword

It is a pleasure to write a foreword to Hai Zhuge's new book and to welcome him to the UK as a colleague, as he takes up his chair at Aston University. Within the wider Semantic Web research project, I think Hai Zhuge is trying to do something bold and important: first, by asking how can big data — and all that that movement now entails — be made to yield up representations that that give us some understanding of the content implicit in the data, but is not essentially textual. This is his Resource Space Model, a multi-dimensional category space that uniformly represents human understanding and the patterns in real and abstract objects. Secondly, he is asking how can we have a common representation for the content of different modalities: not just speech and text but images and 3D objects, the long-awaited Internet of Things. He then takes summarization as a reasonably well-understood task environment where the notion of summarization beyond the textual — the standard case so far — can be explored and ultimately tested. I think he is asking serious and fundamental questions in this work and proposing bold research solutions. This is an important issue in the history of idea development of the semantic web where many have transitioned seamlessly from the term “semantic web” to the “data web”, without always thinking what that entails. For example, the whole motivation of the semantic web was to have a web of understandable meanings or interpretations that the WWW of texts did not have; it was humans reading the texts who supplied the interpretations. The shift to a “data web” downplays that notion of comprehensible or cognitive content and it is that that Hai Zhuge wants to put back. I salute the ambitious nature of his research goals that this book sets out.

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