Yoshiki Wakabayashi · Takashi Morita Editors

Ubiquitous Mapping

Perspectives from Japan



Contents

On the Establishment of Theoretical Cartography and Meta-cartography and the Subsequent Development of Ubiquitous Mapping	1
Part I Technological Issues and Applications	
Ubiquitous Digital Storytelling with Local and Dynamic Georeferencing of Analog Maps Masatoshi Arikawa and Min Lu	19
Developing and Evaluating <i>Virtual Heiankyō AR</i>	39
Role of Maps and Public Street Signs in Wayfinding Behavior by Foreign Visitors	65
Part II Human Aspects	
Use of Smartphones as Navigation Aids and its Effects on Acquisition of Spatial Knowledge	79
Intergenerational Differences in the Use of Maps: Results from an Online Survey Yoshiki Wakabayashi	97
Development of OpenStreetMap Data in Japan	113

viii Contents

Part III Social and Practical Issues	
Stigmatization on the Web: Ethical Consideration of Geospatial Stigmatization via Online Mapping	129
How Have Tactile Maps for the Visually Impaired Been Situated in Japan?: From the Analysis of Newspaper Articles	143
Mapping Isolation: Distribution of Isolated Foreign Women Living in Rural Japan	155