Preface

The trend toward the introduction of automated driving has further accelerated in recent months. Vehicle manufacturers around the world have announced plans to deploy highly automated functionalities building on recent successes in advanced driver assistance systems. In addition to this evolutionary approach, a more radical scenario of fully connected self-driving cars is heavily discussed. At the same time, public authorities have presented substantial plans for establishing test routes, settings standards and creating regulatory frameworks.

In this context, we are excited to present the second volume of "Road Vehicle Automation," a publication as part of the Springer Lecture Notes in Mobility. Same as last year's volume, this publication gives an overview on the road vehicle automation workshop held about one year ago. This year's volume contains information from the Automated Vehicle Symposium 2014, held in Burlingame (CA), July 15–17, 2014. We are again very pleased and grateful that so many presenters from the symposium responded to our call and offered a summary of their talks and working groups.

This year, in order to ease the workload for the authors, we decided to offer the opportunity to publish just a six-page summary of the talks and working groups. Interestingly enough, many authors went beyond that mark, resulting in a level of detail in each contribution, which we as the editors appreciate. We are also glad to see a sizable portion of the publications reflecting the increasing discussion of human factors, clearly marking one of the key aspects on the path toward automated driving. We hope you, the readers, will appreciate the spectrum of publications and the structure that we chose; and we are sure that this publication is equally informative to industry experts, academics, public servants, as well as media and general public.

We truly enjoyed editing this book, and we clearly want to point out that of course this publication would not have been possible without great support from many different individuals and groups. First, we wish to thank all authors who took time out of their busy schedule and turned their talks and working group results into essays that make this book what it is—a truly remarkable milestone on the path toward vehicle automation. Second, we are thanking the TRB and AUVSI

representatives who organized the symposium in the first place, who graciously agreed to have us edit this book as a summary of the event, and who contributed to it as authors. Most notably we would like to thank Jane Lappin, Steven Shladover, and Bod Denaro.

We are also deeply indebted to Sebastian Stagl and Zakia Soomauroo at VDI/VDE-IT who proofread and thoughtfully edited all contributions to ensure a consistently high level of publications. Their efforts and dedication is highly appreciated. And also, we are tremendously thankful to Jan-Philip Schmidt at Springer; without his advice this book would never have gone into print.

And finally, we would like to thank all readers for purchasing this book and thereby contributing to spreading results as well as still-unanswered questions related to vehicle automation. We sincerely hope that this book will further energize the dialogue around what might rightfully be called the next big chapter for the automobile: Road Vehicle Automation.

April 2015   Gereon Meyer
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