

A. Buke Hiziroglu

Autonomous Vehicles and the Law

How Each Field is Shaping the Other

Second Edition

Synthesis Lectures on Advances in Automotive Technology

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Perkins Coie LLP
Seattle, WA, USA

ISSN 2576-8107 ISSN 2576-8131 (electronic)
Synthesis Lectures on Advances in Automotive Technology
ISBN 978-3-031-56228-0 ISBN 978-3-031-56229-7 (eBook)
<https://doi.org/10.1007/978-3-031-56229-7>

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*To my parents for always believing in me and
encouraging me to strive*

Preface

Disciplines can no longer be isolated. Technology has rapidly evolved to the point that driverless vehicles have truly become a reality and are not something out of a futuristic exhibition from the 1950s. However, engineers and researchers working on the development of autonomous vehicles cannot ignore the policy implications and policymakers as well as attorneys cannot ignore the technology. We are at a point where cross-disciplinary collaboration is vital in order to produce a technology that will immensely benefit society. This is the goal of this book; to educate autonomous vehicle developments on legal theory at the most basic level. Both policymakers and lawyers may also find the book helpful in gaining a basic understanding of the technology the developers are working on.

This text is designed to provide the reader with a basic understanding of the law and how it impacts autonomous vehicle technology development. Naturally, this is a rapidly evolving area, but some of the legislation has not changed in years so it is important for the developer to have a basic understanding. In this book we will begin our discussion with a brief introduction to automotive technology and learn about the current state of autonomous vehicle system. From there we will focus our discussion on automotive legislation and the direction it is going in order to adapt to autonomous vehicle systems. We will also study the fundamentals of telematics and communication systems. Additionally, we will discuss the government's policy for cybersecurity and data protection. Furthermore, we will take time to address where liability stands when driverless cars are released on public roads; in this portion of the book readers will also be able to formulate arguments for legal claims. Lastly, we will end our discussion of autonomous vehicles and the law by reflecting on the future direction autonomous vehicle technologies are heading towards.

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