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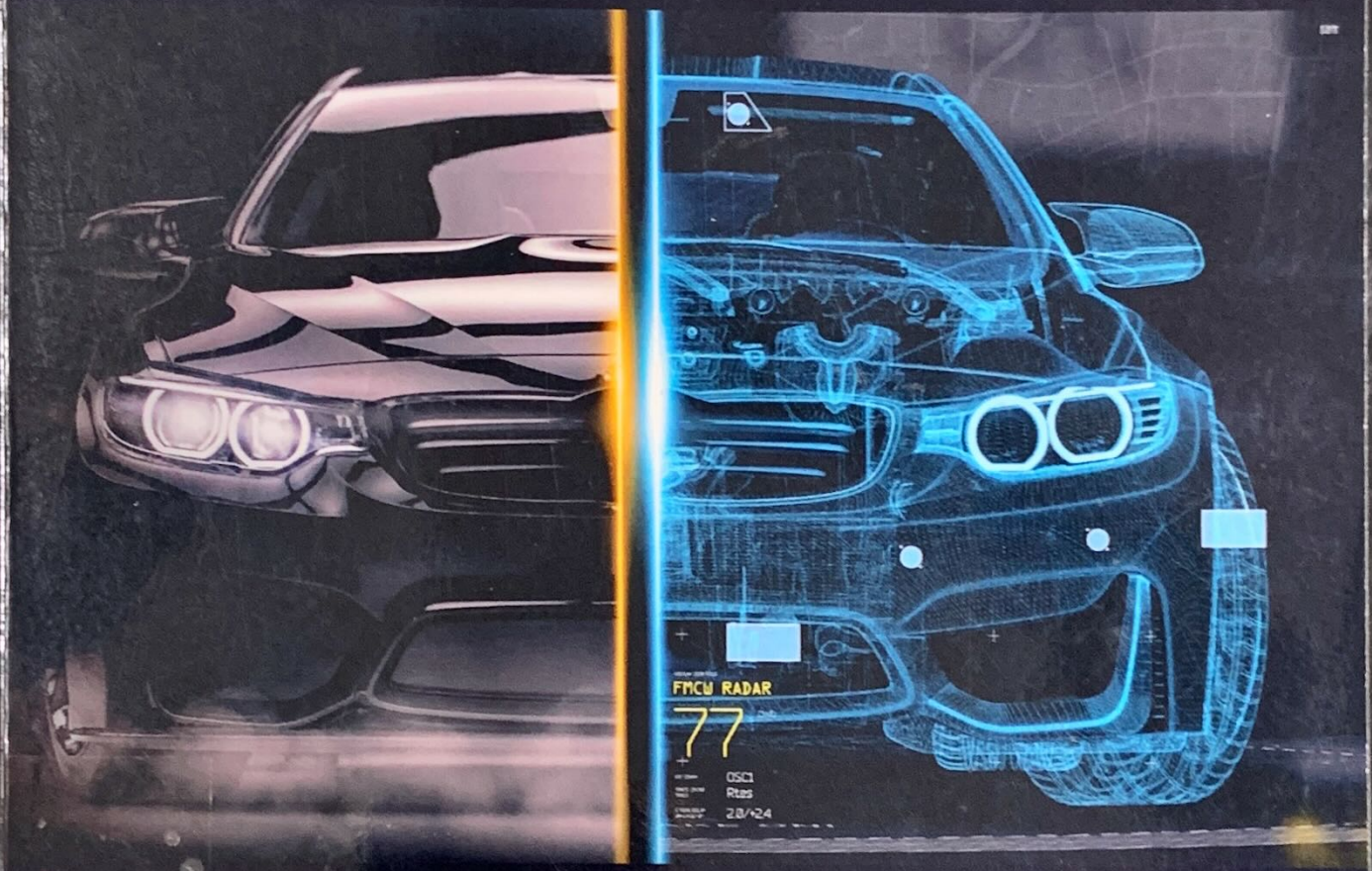
INTRODUCTION TO SELF-DRIVING VEHICLE TECHNOLOGY



Hanky Sjafrie

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Introduction to Self-Driving Vehicle Technology

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Preface

Self-driving vehicles, or SDVs, are a hot topic currently. However, SDVs are based on complex technology, and it can be frustrating trying to get hold of information on exactly how they work. This book sets out to teach you the core concepts that make SDVs possible. It is aimed at people who want to get their teeth into self-driving vehicle technology, providing genuine technical insights where other books just skim the surface.

If you are a software developer or professional engineer who is eager to pursue a career in this exciting field and wants to learn more about the basics of SDV algorithms, then this book will be a good starting point. Likewise, if you are an academic researcher who is keen to apply your expertise in SDVs and wants to know what it takes to build an SDV prototype, then this book should answer your questions. But this book is also suitable for all technology enthusiasts and journalists who want a clear and readable overview of the technologies that make SDVs possible. It covers all the bases, tackling everything from sensors and perception to functional safety and cybersecurity. It also passes on some practical know-how and discusses concrete SDV applications along with a discussion of where this technology is heading.

Sadly, there is a distinct reluctance to divulge technical details in this emerging industry. SDV companies are unwilling to share details of their systems or the data they collect while testing their vehicles. This data is regarded as a valuable commodity in the race to teach cars to drive themselves. Hopefully, this book will go some way to redress this imbalance in information sharing.