

## Foreword

The *Human Resource Program for Information and Communication Technology* sponsored by the Ministry of Education (MOE) in Taiwan, lead by myself, has been a key program in the past 10 years to bridge possible gaps between university education and industrial human resource demands, and to train and cultivate sufficient as well as high-quality and skilled young professionals in the blooming global telecommunication market. After a detailed analysis of the ICT industrial trend by a review board consisted of experts and professionals from both academic and industrial sector around 2006, MOE in Taiwan decided to focus the talent cultivation direction only on a few selected areas of emerging technology. *Telematics and Vehicular Networks* has emerged as one such important technology since the research progress in the telematics and vehicular networking was so significant that related industry has become booming around the world and one can easily expect future drivers can enjoy the benefit from related smart telematics products and services. We also believe telematics and vehicular networks can be categorized as a special kind of *Green ICT* Technologies since it also helps to save energy in many scenarios.

In the past few decades, Taiwan's telecommunication and ICT industry has experienced a long period of high growth and fast technology evolution. For example, the communication industry in Taiwan has increased up to 8 folds around 10 years, with its manufacturing capacity ranging from traditional LAN switches to 3G smart phones. Without surprises, recent industry trends in smart cars and vehicular networks have also created a strong demand on talent engineers with good hand-on experiences in related products and services. Again, universities and the academic community have been asked to keep upgrading key ICT courses and laboratories to link up with the telematics industry in a timely fashion. In response to this demand, a prestigious team was selected from the academic community in Taiwan in 2007, to aggregate teaching resources, refine the essential courseware, and enhance experiment environments for training talented students in this field. An intercollegiate telematics promotion center was also established for completing this task and Professor Chung-Ming Huang, National Cheng-Kung University, was selected to lead this center for his dedication and the knowledge and research experience he has accumulated in this field.

This book, *Telematics Communication Technologies and Vehicular Networks: Wireless Architectures and Applications*, edited by Prof. Chung-Ming Huang and Prof. Yuh-Shyan Chen, is a work contributed by such a group of telematics experts and professors in this field. This book has successfully covered a wide range of technical topics, including vehicular network architecture, related communication protocols, ITS/telematics applications, navigation systems, location based services and embedded systems.

Many chapters in this book is self-guided and can be used a tutorial. In general, it should be a valuable textbook, guidance and/or reference for students, researchers, engineers, technical managers, and other professionals in this field. I believe all readers can enjoy reading this book.

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