Foreword

I am happy that the faculty members of VIT University are quite active in preparing learning materials for use by students of engineering and other disciplines. This book, *Challenges, Opportunities, and Dimensions of Cyber Physical Systems*, authored by the faculty team comprised of Dr. P. Venkata Krishna, Dr. V. Saritha, and Ms. H. P. Sultana of the School of Computer Science and Engineering is the latest addition to the list of books published by VIT faculty members. I hope that the book will be of immense use to students, teachers, and professionals.

I understand that Cyber Physical Systems (CPS) is an emerging area that integrates every branch of the cyber world, including networking, data mining, programming, etc., and that it involves almost every aspect the physical world as well. Every stakeholder from the physical world, such as humans, organizations, utilities, other physical entities, etc., stands to benefit from this technology. The prime objective of CPS is to enrich this world and make it a better place to live. Hence, this domain needs to be explored meticulously to bring out its potential advantages.

I congratulate the authors on their remarkable efforts in bringing out a detailed and well-organized book about cyber physical systems, which I hope would fulfill the requirement for scholarly material on the topic. I am confident that the wide and detailed discussions on various topics will augment further research in this evolving field. This book should meet the intellectual demand of researchers, students, and curriculum developers. Being one of the earliest books in this emerging field, it is a pioneer in the domain of the convergence of cyber and physical worlds.

I wish the authors all the best.

G. Viswanathan
VIT University, India

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**G. Viswanathan**, the Founder-Chancellor of VIT University, was born on December 8, 1938, in a remote village near Vellore in Tamil Nadu. Dr. GV’s life is a source of inspiration to the modern-day youth. Dr. GV completed the Advanced Management Program at Harvard Business School in 2003, nearly four decades after his university education, reaffirming his urge to be an eternal student. He excelled in academics from the beginning. His pre-university education at Voorhees College, Vellore, initiated him to the world outside. From there, he went on to obtain his bachelors and Master’s degrees in Economics from the prestigious Loyola College, Chennai. Following this, he graduated in Law from the Madras Law College. Dr. GV founded Vellore Engineering College in 1984 at Vellore. He envisioned that this institution would offer world-class education to students who would in turn create an indelible impact on society. The engineering college that started with an intake of 180 students in 1984 has evolved as a VIT university with two campuses. Dr. GV’s passion for societal development and compassion for the underprivileged have resulted in the introduction of several schemes for uplifting the women and unemployed youth in the region to help them become self-reliant. Dr. GV offers scholarships to students from disadvantaged sections of society to enable them to pursue higher studies. Dr. GV has established the Universal Higher Education Trust to create opportunities for higher education to every deserving student in the region. He has adopted several villages in an effort to improve the quality of lives of the rural people. His vision of transforming Vellore into a greener and cooler town by planting one million saplings has begun to yield fruit. Dr. GV’s farsightedness extends beyond horizons.