BIODATA & BOOK ENDORSEMENT:

Dr. Satish Kumar Peddapelli

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Dr. Satish Kumar Peddapelli, M.Tech., Ph.D., FIE, FTAS, SMIEEE, MISTE, MSSI, is a distinguished academician, researcher, and academic administrator currently serving as the Registrar of Satavahana University, Karimnagar, and a Professor of Electrical Engineering at the University College of Engineering (A), Osmania University, Hyderabad. He previously served as the Director of Rajiv Gandhi University of Knowledge Technologies (RGUKT), IIIT Basar, from 2022 to 2024. His professional career reflects a strong commitment to engineering education, academic leadership, technological innovation, and institutional development.

With over 29 years of extensive teaching and research experience, Dr. Peddapelli has developed expertise in Power Electronics and Drives, Multilevel Inverters, Pulse Width Modulation, Special Electrical Machines, Renewable Energy Systems, DC Microgrids, Power Quality, and Green Hydrogen. His scholarly contributions include over 130 research papers published in international journals, 43 conference papers, five authored textbooks, and contributions to an edited book. Under his research supervision, eleven scholars have successfully completed their Doctor of Philosophy (Ph.D.) degrees, while eight doctoral scholars are currently pursuing their research under his guidance. His recent initiative to introduce Artificial Intelligence (AI)-based applications in Electrical Engineering at the Department of Electrical Engineering, Osmania University, has fostered a competitive and innovation-driven academic environment, encouraging students and faculty members to develop skills aligned with contemporary industry requirements and evolving market demands.

Dr. Peddapelli has undertaken several funded research projects and international collaborative initiatives, including India–Slovenia and Indo–Sri Lanka research collaborations. His contributions to engineering research encompass multiple patents and the development of innovative Multilevel Inverter prototypes and a renewable-energy-based DC House. These initiatives reflect his commitment to advancing sustainable energy technologies, improving electrical engineering applications, and promoting practical, research-oriented technological solutions.

His distinguished academic and professional achievements have been recognized through several prestigious awards, including the Rajarambapu Patil National Award conferred by the Indian Society for Technical Education (ISTE) in 2024, the Engineer of the Year Award presented by the Institution of Engineers (India) (IEI) in 2022, the Telangana State Best Teacher Award in 2014, and the Award for Research Excellence. These recognitions highlight his sustained contributions to engineering education, scientific research, technological development, and academic excellence.

Dr. Peddapelli is a Fellow of the Institution of Engineers (India) (FIE) and the Telangana Academy of Sciences (FTAS), as well as a Senior Member of the Institute of Electrical and Electronics Engineers (IEEE). His professional affiliations also include membership in the Indian Society for Technical Education (ISTE) and the Systems Society of India (SSI). These memberships reflect his continued engagement with professional engineering communities, academic institutions, and research organizations.

Through his contributions to teaching, scholarly research, doctoral supervision, academic administration, technological innovation, and international collaboration, Dr. Satish Kumar Peddapelli continues to support the advancement of electrical engineering education, sustainable energy research, and institutional excellence. His professional vision emphasizes interdisciplinary innovation, emerging technologies, research-

driven education, and the development of future-ready engineering professionals capable of addressing evolving industrial and societal challenges.

BOOK ENDORSEMENT:

The responsibility of a university extends well beyond awarding degrees or delivering prescribed curricula. Higher education must cultivate intellectual independence, encourage students to question established ideas, and prepare them to engage with knowledge that continues to evolve. Artificial Intelligence presents both an opportunity and a challenge in this regard, as its expanding applications demand new forms of technological understanding across academic disciplines.

The **World's First AI Vocabulary Handbook – 13,000+ AI Terms from A to Z** is a noteworthy attempt to address one aspect of this educational challenge. By bringing together an extensive collection of AI-related terminology, the publication offers students, educators, researchers, and professionals a reference through which they can become familiar with the language of emerging intelligent technologies.

In academic institutions, students encounter technical concepts at different stages of their learning. Some develop an early interest in computing and Artificial Intelligence, while others approach these subjects through engineering, mathematics, science, management, or interdisciplinary studies. A comprehensive vocabulary reference can help learners from varied educational backgrounds understand unfamiliar expressions and participate more confidently in discussions involving technological developments.

The purpose of higher education is not simply to provide students with existing knowledge, but to develop their capacity to understand new ideas, examine them critically, and continue learning long after their formal education is complete.

What makes this handbook relevant to contemporary education is the breadth of terminology it brings together. Alongside established concepts, exposure to specialized and emerging expressions can encourage students to explore subjects beyond their immediate academic requirements. Such familiarity may also support independent study, technical presentations, project preparation, and engagement with research literature.

For faculty members and research scholars, a resource of this nature can complement teaching and academic investigation by providing a convenient starting point for exploring unfamiliar concepts. Engineering graduates and professionals may similarly benefit from revisiting established terminology and understanding developments outside their primary areas of specialization.

The increasing integration of Artificial Intelligence into engineering, healthcare, agriculture, business, and scientific research has also made interdisciplinary communication more important. Universities have a significant role in encouraging this exchange of knowledge. A shared understanding of technical terminology can help students and researchers appreciate how concepts developed in one discipline may find meaningful applications in another.

Of course, familiarity with terminology must be accompanied by conceptual understanding, critical evaluation, and practical learning. The academic usefulness of a reference publication depends on the accuracy of its definitions, clarity of explanations, and relevance to current technological developments. These qualities are essential if such a resource is to remain useful as Artificial Intelligence continues to advance.

I regard this handbook as an encouraging contribution to making AI-related knowledge more approachable across educational and professional communities. Its extensive coverage offers opportunities for academic enrichment, independent exploration, and continuous professional learning.

An educational resource achieves lasting significance when it encourages learners to pursue knowledge beyond what is formally taught. The value of this handbook will ultimately be reflected in the questions it encourages students to ask, the subjects it motivates them to explore, and the intellectual independence they develop along the way.