



CALL FOR BOOK CHAPTERS

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Book Title: Artificial Intelligence-empowered Modern Electric Vehicles in Smart Grid Systems

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<https://scholar.google.com/citations?user=pFDEQLUAAAAJ&hl=en>

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<https://www.scopus.com/authid/detail.uri?authorId=56576145100>

Refer website for details:

<https://sites.google.com/view/ai-electric-vehicle/home>

Scope of the book:

This book is the first-ever “how-to” guide addressing one of the most overlooked practical, methodological, and moral questions in any nations’ journeys to maintain Privacy and Security in the energy sector: How reliable and real-time remote monitoring can be achieved? How energy and EV systems can optimize their infrastructure and workflows to make the most of AI promising use cases? Explore most promising aspects of AI for EV industries? How AI can help EVs and smart grid systems do better? What should we do if we think my information has been compromised? It differs from other published books as it includes a detailed framework to maintain security and privacy in AI-enabled EV services using Blockchain Technologies, and comparative case studies with respect to various performance evaluation metrics, such as privacy preservation, V2G, Peer-to-peer charging, scalability, and legislation.

- This edited book will cover the current state-of-the-art of AI-enabled EVs applications.
- The chapters will be balanced between theoretical and practical coverage of a wide range of issues in EV technology.
- The chapters will cover a broad range of latest tools and techniques required to process the ever-evolved data generated in EV sector.

- From the existing proposals, it has been observed that AI and blockchain can revolutionize most of the current and future EV applications by providing a fine-grained access control.
- Open issues and challenges of AI-enabled modern EVs are analysed. Finally, a comparison of existing proposals with respect to various parameters is presented, which allows the end users to select one of the proposals in comparison to its merits over the others.
- Case studies to demonstrate the adoption of blockchain for AI-enabled EVs, which aware the readers for future challenges associated with this adoption, especially for smart EV applications.

Topics of Interest:

This book solicits contributions, which includes adoption of AI for modern EVs and requirements related to smart grid system. This book is organized into four sections and we welcome book chapter contributions on the following **(but are not limited to)** themes:

Section-1: Introduction of AI and EVs in Smart Grid System	Section-2: Energy Management for AI-empowered modern EVs
Introduction to AI-empowered EVs in SG	Demand Response Management using AI-empowered EVs
Communication Technologies for EVs	Energy Prediction for future energy supply
Computational aspect of AI-empowered EVs	Renewable Energy Harvesting for EV Charging Station
Application area of AI-empowered EVs	Battery-operated Electric Vehicles and Plug-in Hybrids Electric Vehicles
Section-3: Energy Trading for AI-empowered modern EVs	Section-4: Case Studies and futuristic trends for AI-enabled EVs
Peer-to-Peer Energy Trading using Renewable Energy Sources and EVs	Case Studies and Testbeds of AI-empowered EVs Systems
Smart Energy Management using Vehicle-to-Vehicle and Vehicle-to-Everything	The futuristic trends for modern EVs
Vehicle-to-Vehicle power transfer	Conclusion
Cyber Security Challenges for AI-empowered EVs	

Each chapter may include concepts from the fields of Electric Vehicle, Artificial Intelligence, Machine Learning, Energy Trading, Blockchain Technologies, and Smart Grid System, etc.

Important Dates:

Page write-up (abstract with title keywords and author detail):

May 30, 2023

Preliminary acceptance/rejection notification:

June 14, 2023

Full chapter Submission:

June 30, 2023

First review notification:

July 10, 2023

Revised chapter submission:

July 20, 2023

Final Acceptance/Rejection notification:

August 1, 2023

Camera Ready submission:

August 15, 2023

Book Publication (Tentative)

September-October 2023

Submission Procedure:

Please submit your **one-page write** up (with abstract of 300- 500 words and 6 keywords) of your chapter along with tentative Table of Contents through Online Submission System (ONLY).

Easy Chair Submission Link: <https://easychair.org/conferences/?conf=aiempoweredev2023> on or before **"30th May 2023"**. Upon acceptance of the proposal, further instructions for submission guidelines according to the Academic Press, imprint of Elsevier will be communicated.

For further details, contact:

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