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(57) Abstract :
An advanced system for optimizing electric vehicle (EV) charging schedules is presented, incorporating real-time data analytics, predictive algorithms, and user customization to efficiently manage energy consumption. This system aims to balance multiple objectives, including minimizing electricity costs, optimizing the use of renewable energy, reducing grid load during peak times, and catering to individual user charging needs. The invention's adaptability allows it to integrate seamlessly with existing EV infrastructure, offering a scalable and user-friendly solution that enhances the sustainability and economic viability of EV charging.

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