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## Solar Operated Car Enabled with AI

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Abstract: The convergence of renewable energy and artificial intelligence (AI) has spurred a transportation revolution, exemplified by the rise of solar-powered cars equipped with advanced AI capabilities. This abstract digs into the integration of solar energy and AI technology in autos, examining their synergistic potential to transform the automotive industry and pave the way for a more sustainable future. The paper presents the concept of solar-powered cars and discusses their importance in reducing environmental concerns connected with regular fossil-fuelled vehicles. Solar energy, captured by solar panels built into the vehicle's construction, provides a clean and abundant power source, minimizing reliance on non-renewable resources and lowering greenhouse gas emissions. Furthermore, advances in solar panel efficiency and energy storage technology have increased the practicality of solar-powered vehicles for widespread use. Furthermore, AI-powered autonomous driving capabilities improve safety by reducing human error and allowing for proactive collision avoidance methods. The paper highlights how AI-enabled solar-powered vehicles have the potential to completely change the automotive sector and hasten the shift to a sustainable transportation network

**Keywords:** Energy management, Mobility, Smart Grid, Artificial Intelligence, Renewable Energy, Sustainability, Solar-Powered Vehicles

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