## IJARSCT





International Journal of Advanced Research in Science, Communication and Technology

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

Volume 5, Issue 5, April 2025



## **EcoGen: Generative Landscape Design**

Prof. Pallavi Chandratre<sup>1</sup>, Saiprasad Jadhav<sup>2</sup>, Abhishek Shirke<sup>3</sup>, Rohan Patel<sup>4</sup> Faculty, Department of Computer Engineering<sup>1</sup> Student, Department of Computer Engineering<sup>2,3,4</sup>

Shivajirao S Jondhale College of Engineering, Dombivli (E), Thane, Maharashtra, India

Abstract: EcoGen is an AI-driven application planned to revolutionize generative scene plan by coordination Google's Generative AI API and leveraging the Gemini AI suite. It permits clients to characterize key parameters such as landscape highlights, plant species, and climate conditions, producing environmentally adjusted and outwardly compelling 3D scene models. At its center, EcoGen utilizes Generative Antagonistic Systems (GANs) to make feasible and versatile plan arrangements. Built with Python and Streamlit, the stage guarantees an instinctive, intuitively encounter custom-made for scene planners, urban organizers, and natural architects looking for inventive and feasible approaches to urban and common spaces.

Keywords: Generative Plan, Fake Insights, Scene Engineering, Maintainability, GANs, Urban Planning



