

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202511100927 A

(19) INDIA

(22) Date of filing of Application :17/10/2025

(43) Publication Date : 05/12/2025

(54) Title of the invention : A VIRTUAL REALITY PLATFORM FOR ADVANCED DRIVER TRAINING SIMULATIONS

(51) International classification	:G09B0019160000, G09B0009040000, G06F0003010000, G09B0009050000, G09B0009000000	(71) Name of Applicant : 1)NOIDA INSTITUTE OF ENGINEERING & TECHNOLOGY Address of Applicant :19, Knowledge Park-II, Institutional Area, Greater Noida – 201306, Uttar Pradesh, India. Uttar Pradesh India
(31) Priority Document No	:NA	(72) Name of Inventor :
(32) Priority Date	:NA	1)MAYANK DEEP KHARE
(33) Name of priority country	:NA	2)VATIKA JALALI
(86) International Application No	:	
Filing Date	:01/01/1900	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The invention discloses a Virtual Reality Platform for Advanced Driver Training Simulations, comprising a VR simulator (101), AI-based training engine (102), data analytics module (103), cloud repository (104), feedback interface (105), and dashboards (106). The system creates immersive environments for safe driver training, dynamically adapts to trainee performance, and provides analytics-driven progress assessment. Experimental validation confirmed improved hazard response, risk awareness, and training efficiency, making the invention an effective tool for enhancing road safety and reducing accidents through advanced driver training simulations.

No. of Pages : 14 No. of Claims : 6