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## INTELLIGENT ADAPTIVE LUMINANCE CONVERGENCE

HP INC

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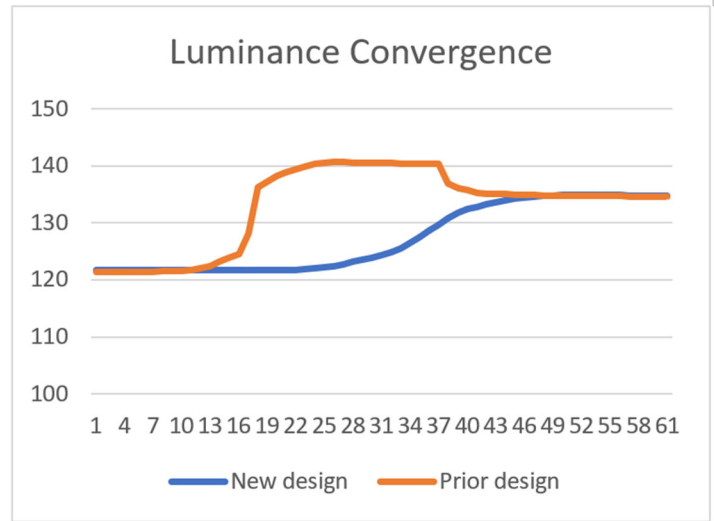
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**Intelligent Adaptive Luminance Convergence**

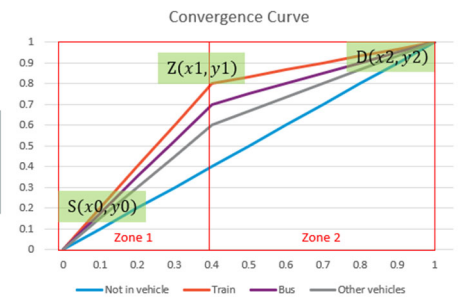
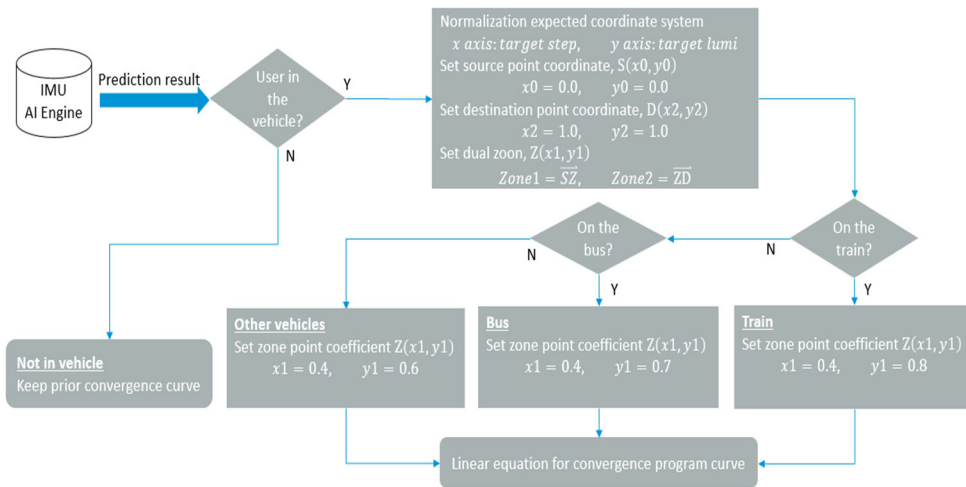
This disclosure is using IMU sensor to detect while user in the vehicle, such as train or bus, to change auto exposure program in camera. When user on the vehicle and faced luminance big changes, the new program which calculated through unique algorithm to adapt the best convergence behavior in various.

Intelligent adaptive luminance convergence was designed to deliver the best video experience in hybrid work and no matter indoor, outdoor or on transportation. The existing design only one convergence program for all scene, the exposure delay seriously impacts the video experience. However, the too sensitive exposure is also concerned on auto-exposure haunting.

The new idea is using IMU AI to train by ML to predict whether user on the vehicle. Camera can collaborate with IMU sensor to intelligently adapt the best curve to response the environment and use scenarios. To design multi zone of program curve to change the coefficient for different auto-exposure speed and target brightness while user is on the transportation



**Flow Chart & Algorithm:**



***Disclosed by Dennis Mo, Jerry Hung, Bryan Chuang and Alex Chu, HP Inc.***