

AI based vehicle analytics for smart cities

Venkatesh Wadawadagi^{1*}

¹*Solution Consultant, Sahaj Software Solutions*

Abstract

Improving cities is a pressing global need as the world's population grows and our species becomes rapidly more urbanized. In 1900 just 14 percent of people on earth lived in cities but by 2008 half the world's population lived in urban areas. Today, 55% of the world's population lives in urban areas and this percentage is expected to rise to 68% by 2050.

The use of artificial intelligence in smart cities can be life-changing if implemented in the right spaces. There are multiple zones in cities or in urban development where AI can be used to improve the performance and efficiency of the system. AI has the ability to understand how cities are being used and how they are functioning. It assists city planners in comprehending how the city is responding to various changes and initiatives. AI with the help of Deep Learning and Computer Vision has changed the way vehicle analytics is done. With these advancements, vehicle analytics is helping in implementing intriguing solutions like Toll booth automation, Smart parking, Gate security, ATCS (Adaptive Traffic Control System), RLVD (Red Light Violation Detection) etc. This talk starts by briefing about what's AI based vehicle analytics and what all it includes, and goes on to talk about varieties of applications of vehicle analytics including implementation and deployment challenges. Towards the end talk focuses on why it's need of the hour for this populated, industrialised and tech-driven era.

Biography

Venkatesh is a senior data scientist and practice leader with 9 years of experience. As a solution consultant at Sahaj Software Solutions, he helps businesses solve complex problems using AI- powered solutions. He specialises in Deep Learning, Computer Vision, Machine Learning, embedded-AI and business intelligence. He has extensive experience in building algorithms, leading the teams/efforts, architecting the solution and bit of research. He has worked on variety of solutions ranging from building brand monitoring system, building a Deep Learning Inference Engine for an e-AI chip, implementing Adaptive Traffic Control System to research and development in the area of ATM surveillance.