

**Dr. Asad Lesani**  
**VP of Smart Infrastructure Product**  
**Ouster**

Dr. Asad Lesani, VP of Smart Infrastructure Product at Ouster, is a distinguished leader with over 15 years of experience in intelligent transportation systems, working across public and private sectors. During this time, he has collaborated closely with cities and state DOTs to drive adoption of lidar technology as the next generation of traffic management and road safety solutions.

As a visionary thought leader and tireless advocate for smarter, safer roadways, Dr. Lesani has consistently demonstrated exceptional leadership and innovation. His work advancing lidar as a transformative tool in transportation embodies the very spirit of this honor.

Asad co-founded BlueCity, an AI software company dedicated to harnessing lidar for intelligent infrastructure, in 2018 at a time when the industry struggled with the limitations of traditional sensors like video cameras - notoriously unreliable in poor visibility and adverse weather conditions when accidents are most likely to occur. - and inefficient inductive loops. Asad envisioned a necessary fundamental shift in traffic management. Under his guidance, BlueCity developed a revolutionary solution: a combination of AI and lidar technology to capture real-time, multimodal data on road users, speed and trajectories. This provides unprecedented insights and automation to create a pathway to safer roads and enhanced traffic flow.

His exceptional leadership guided BlueCity through its acquisition by Velodyne Lidar in October 2022 and when Ouster merged with Velodyne in 2023, Asad seamlessly transitioned to his current role as VP of Smart Infrastructure Product at Ouster.

Under his leadership, Ouster BlueCity has become a pivotal solution for the industry, the largest deployment of lidar detection technology for traffic and pedestrian safety in the United States today. In downtown Chattanooga, more than 120 intersections are currently being equipped with Ouster BlueCity, providing real-time traffic actuation and enabling proactive safety interventions and Vehicle-to-Everything (V2X) communications. The city initially piloted the technology at 12 intersections, where it achieved a 100% reduction in near-miss incidents on a high-risk city block prompting the broader rollout as part of Chattanooga's push to modernize its transportation infrastructure.

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## A Thought Leader in the ITS Field

Dr. Lesani's contributions as a thought leader are rooted in his deep academic foundation and practical application. With a Ph.D. in Transportation from McGill University, focusing on multi-modal traffic monitoring and surrogate safety analysis for vulnerable road users, Asad identified critical gaps in existing ITS paradigms early on. He recognized that the very times when visibility was poorest – and accident risk highest – were when traditional sensors failed.

His thought leadership is exemplified by BlueCity's groundbreaking approach, which has tackled these long-standing obstacles head-on. By combining the precision of lidar with advanced AI, he championed a solution that could accurately detect, classify, and track people, cyclists, and various types of vehicles in real-time, regardless of environmental conditions.

Dr. Lesani's work is accelerating progress toward Vision Zero and a future where intelligent infrastructure helps save lives every day.

- **Global Adoption:**
  - Under his leadership, lidar-powered solutions have been deployed or booked at over 400 intersections globally, working directly with diverse transportation agencies and municipalities.
- **Game-Changing Solutions:**
  - The Ouster BlueCity NEMA TS2-system level certified solution, a direct result of his pioneering efforts, is an industry game-changer. It provides a complete, one-stop-shop for actuating traffic signals by replacing outdated inductive loops and unreliable sensors with 3D multimodal detection that collects granular data on road users to deliver dynamic traffic actuation and critical safety analytics, directly supporting Vision Zero initiatives.
- **Pioneering V2X Integration:**
  - Recognizing the synergistic future of connected infrastructure, his work ensures that the same lidar solution can be seamlessly integrated with roadside units (RSUs) for V2X communications, paving the way for advanced, cooperative perception and safer interactions between vehicles and their environment.

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- **Tangible Impact:**

- Dr. Lesani's innovations are directly contributing to reducing fatalities and collisions, providing unprecedented real-time visibility for faster interventions, and ensuring that traffic flow is truly optimized for all road users. His work empowers cities to transition from reactive responses to proactive, data-driven decisions that save lives and improve quality of life. A well known and respected member of the ITS community across the globe. Dr. Lesani has tireless enthusiasm to improve traffic management and road safety, working in collaboration every day with departments of transportation, research universities and consultants. Dr. Lesani speaks regularly at industry events and meetings and conducts deep training sessions with traffic engineers to continue to drive industry transformation

Dr. Asad Lesani's journey from a visionary co-founder to a pivotal leader within the world's largest pure-play lidar company demonstrates an extraordinary commitment to advancing ITS. His profound impact on technology, industry standards, and global deployments makes him an exceptionally deserving recipient of the Lifetime Achievement Award. He has not only envisioned a smarter, safer future for transportation but has demonstrably built the tools to achieve it.

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