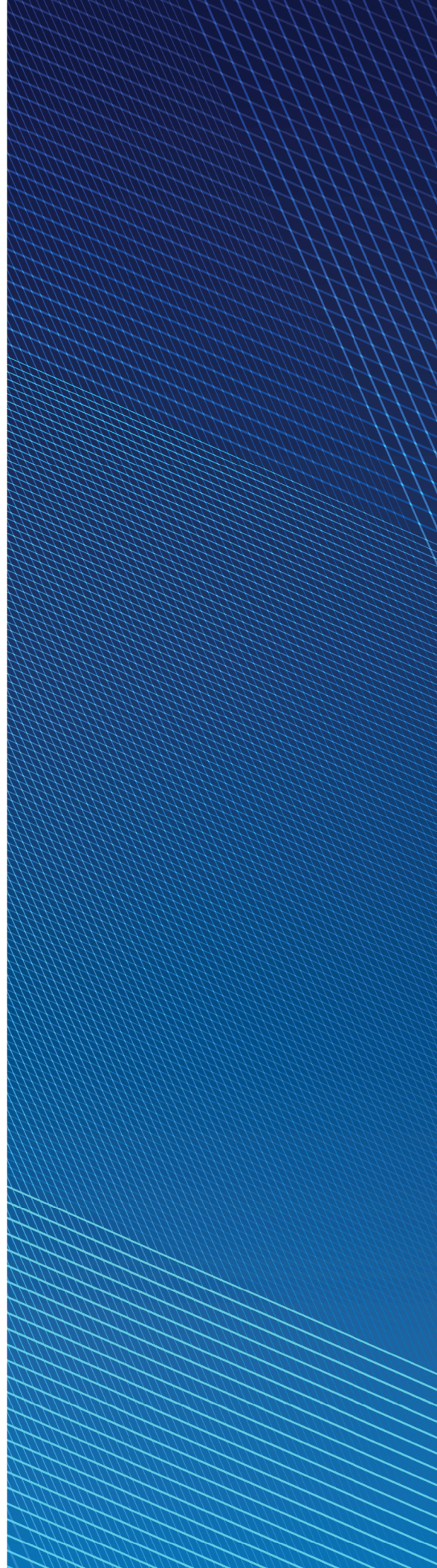


IMAGRY RECEIVES THE 2023 ENABLING TECHNOLOGY LEADERSHIP AWARD

*Identified as best in class in the European
autonomous driving solutions industry*



Best Practices Criteria for World-Class Performance

Frost & Sullivan applies a rigorous analytical process to evaluate multiple nominees for each award category before determining the final award recipient. The process involves a detailed evaluation of best practices criteria across two dimensions for each nominated company. Imagry excels in many of the criteria in the autonomous driving solutions space.

AWARD CRITERIA	
<i>Technology Leverage</i>	<i>Customer Impact</i>
Commitment to Innovation	Price/Performance Value
Commitment to Creativity	Customer Purchase Experience
Stage Gate Efficiency	Customer Ownership Experience
Commercialization Success	Customer Service Experience
Application Diversity	Brand Equity

Imagry’s Mapless Autonomous Driving Software

Headquartered in San Jose, California and founded in 2015, Imagry is empowering the future of autonomous driving with its unique mapless autonomous driving solution. The company replaces the traditional approach to autonomous driving, which relies heavily on Simultaneous Localization and Mapping (SLAM) and high-definition (HD) maps, with a mapless autonomous driving software, thereby removing uninterrupted network connectivity and location limitations of pre-mapped areas. As such, the company’s autonomous driving software provides original equipment manufacturers (OEM) with greater flexibility by removing limitations with the operation design domain (ODD) while safeguarding driving efficacy.

Imagry’s Mapless Autonomous Driving Software

With a global focus on enhancing comfort, convenience, and safety in future vehicles, OEMs are keen to scale existing advanced driving assistance systems (ADAS) to L2+ hands-off driving and L3 eyes-off autonomous driving and further to parking features. While the industry is focusing on incremental development from ADAS towards autonomous driving, Imagry sets itself apart from the competition by taking a top-down approach to develop its autonomous driving solutions. It is developing a powerful software solution that can handle most complex scenarios expected at L5, and then scale down to tailor the solution to meet and address customer challenges at less complex use cases at L2+, L3, and L4 autonomous driving.

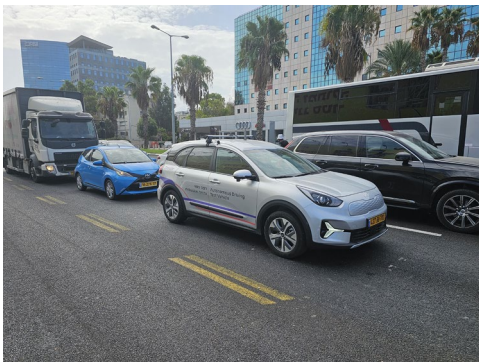
Imagry’s autonomous driving solution has two primary components, “perception” and “motion planning”, which together enable the vehicle to recognize its surroundings and react in human-like manners. The perception system uses multiple camera-based sensors to scan the surrounding environment in 360-degrees with a range of at least 200 meters, processes the available road data, and creates a three-dimensional (3D) real-time map of the environment surrounding the vehicle. It distinguishes between different objects in its path (such as pedestrians, other vehicles, barriers) and annotates them using object

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- Varun Krishna Murthy
Industry Analyst, Mobility

specific-colored bounding boxes, enabling clear object identification and classification, thus feeding into the decision-making process. Imagry’s motion planning system enables the vehicle to react to the perception system’s 3D map, mimicking a human driver’s reaction to situations. The motion planning system provides spatial reasoning through its AI-powered, deep neural networks, allowing the autonomous driving software to adapt to the current environment based on previously learned cases, thus “thinking” and acting like a skilled driver. As a result, the complete autonomous driving solution is continuously enhancing its capabilities via supervised learning cycles, empowering safe and effective driving.

Imagry’s Vehicles in Traffic



Source: Imagry

Easy Deployment and Flexibility for Enhanced Value

Competitors within the autonomous vehicle solution market leverage HD maps to guide autonomous driving systems using centimeter-level data to position a vehicle in a lane. However, this approach constrains the vehicle’s operation to specific areas and roads that are previously mapped and regularly updated, making it an expensive affair. By removing the HD map component and instead relying on vehicle cameras, Imagry eliminates the geographic and cost constraints of traditional autonomous driving systems, safeguarding its long-term value and empowering seamless geographical expansion (including

off-road applications). Furthermore, Imagry's mapless autonomous driving solution can integrate data from other perception sensors, including light detection and ranging (LiDAR) or RADAR, adding

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redundancy to the perception layer. This redundant perception approach enables Imagry to address challenges, including high-speed driving on highways and driving in low light or less-than-ideal environments (such as heavy rain or snow). The company is also expanding the capabilities of its software to enable integration of data from the advanced sensor, including 4D RADAR, in its sensor suite.

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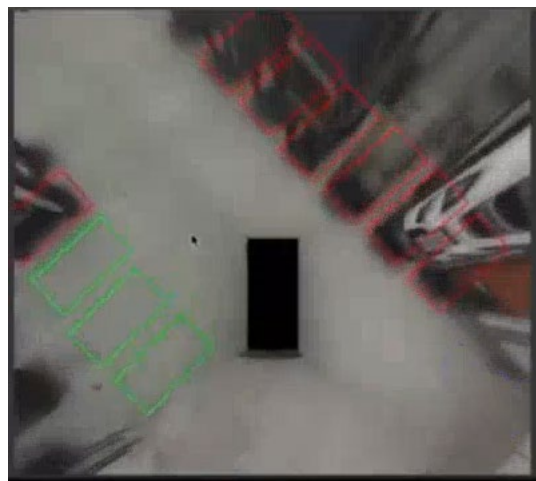
Furthermore, Imagry's software is developed for the current generation vehicles and the next generation Software Defined Vehicles (SDV) that can be customized over-the-air, making updates easy and empowering continuous improvement. As a result, Imagry's solution is highly agile, flexible, and economical, empowering seamless and low-cost scalability for global expansion.

Meeting the Needs of Multiple Industry Segments

According to the International Road Transport Union, there is a shortage of 380,000 bus drivers (about 10% of the total demand), which is expected to increase to 14% by the end of 2023¹. There is tremendous pressure on municipalities and governments to find ways to overcome the driver shortage, leading to a great interest in autonomous driving, and thereby Imagry's capabilities, as it can lessen the future need for drivers while improving passenger satisfaction through more frequent mass transport options and expanded operating hours.

Furthermore, Imagry has partnerships with bus OEMs, including a leading Turkish bus manufacturer with exports to over 30 countries, integrating cameras and computing into buses to empower mapless autonomous driving technology in public transit applications. As a result, in 2022, Imagry received the first-ever autonomous bus permit in Israel from Israel's Ministry of Transportation. Meeting the requirements of the rigorous European New Car Assessment Program (NCAP) safety testing in May

Imagry's Parking Solution



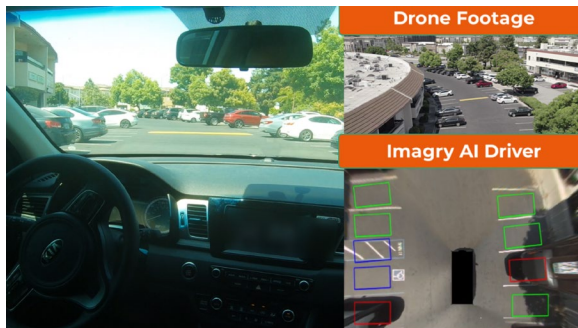
Source: Imagry

¹ <https://www.iru.org/news-resources/newsroom/europe-driver-shortage-triple-2026-if-no-action-new-iru-report>

2023, the first-ever instance in the world of a bus achieving this permit, marked a major milestone for Imagry in paving the future of L4 autonomous buses². Imagry is leveraging this permit for a pilot project within the largest medical center in the Middle East, acting as a proof-of-concept for the benefits of the software in a busy and crowded medical campus setting. Imagry was awarded additional such pilot projects with public transportation operators in two cities. As a result, Imagry is positioned for substantial short-term growth in the public transit industry from the large focus of governments to alleviate the strain of the driver shortage. The company also forms close partnerships with automotive Tier 1 and OEMs, showcasing its mapless autonomous driving technology’s capabilities in mass transit buses and gathering feedback to tailor additional features that will provide the highest value for passenger vehicles.

The next major trend in the autonomous driving industry is to extend its application to parking features. Vehicle parking bays are designed and built differently across regions, including in multi-story or underground car garages, open parking lots, or directly along the street. Imagry’s mapless autonomous

Imagry’s Parking Solution



Source: Imagry

driving software fits into the requirements of parking maneuver might involve vehicle operation in closed buildings, residential streets, and places where SLAM and HD maps might not be applicable.

Imagry identified the need for its software’s application in advanced parking capabilities and has partnered with Continental to apply the mapless technology in Continental’s parking offerings, forming an innovative parking solution that can explore and identify available parking spots. Once a suitable parking spot has been identified and the driver

provides input, the vehicle will be able to complete the parking maneuver autonomously. This advanced capability is a steppingstone to eventually achieve autonomous valet parking. As SDV are deployed in large numbers, OEMs are keen to use their characteristics to extend different parking features as subscription or on-demand features with an objective to improve customer experience and thus generate sustainable revenue. As such, Imagry’s early reaction to industry trends through its advanced innovation and ease of deployment position it for large future growth.

"Imagry's technology approach is a great add-on to Continental's software stack solutions for assisted and automated driving. We are impressed by the talented and highly motivated Imagry team and we are looking forward to jointly realize new automated parking features."

- Aniss Ouyeder, Head of Partnerships & Innovation at Continental Business Area Autonomous Mobility

Remaining on the Forefront of Industry Regulation

Imagry remains an active participant in industry shows and events as well as a member of the Consumer Technology Association and UITP (Union Internationale des Transports Publics), staying abreast of

² <https://imagry.co/ncap-test-successful-autonomous-bus-permit-awarded/>

industry needs while remaining involved in new regulatory standards for autonomous vehicles. As such, the company can ensure its technology remains compliant before regulations are updated to safeguard efficacy and long-term growth. For example, the UN Regulation 155 code will be implemented across Europe in late 2024; Imagry has already aligned its technology and the technology of its partners with the regulatory requirements, making it more effective for use across Europe. Furthermore, with greater industry awareness of Imagry's unique value offering of mapless autonomous driving, the company is experiencing an increase in revenue and expects it to continue as its pilot projects continue proving its effectiveness and overall value. Finally, the company is working to partner with a bus manufacturer in the United States to empower expansion into that country.

Conclusion

Vehicle manufacturers are increasingly including higher advanced driving assistance systems at L2 and autonomous driving technologies at L3 to L4 to enhance consumer experience with comfort and convenience features. Imagry sets itself apart from the competition with its mapless autonomous driving solution based on vehicle camera data in real-time instead of high-definition maps to allow automated driving in unmapped areas and removing the cost of continuous connectivity to update maps. Furthermore, the solution's deep neural networks empowered by artificial intelligence enables it to identify objects (such as road signs, pedestrians, and other vehicles) and effectively react to them, empowering a seamless driving experience that mirrors a human driver's reactions. As a result, Imagry's mapless autonomous driving solution provides safe and accurate driving in urban areas, supporting the transition to L4 autonomous driving. The company has expanded its solution into the public transit segment, integrating cameras and computing onto buses to allow autonomous buses to alleviate the burden of the worldwide driver shortage. Finally, the company focuses on innovation tailored to industry needs, and recently created its autonomous parking solution that can identify available parking spots, providing technology for the future of autonomous valet parking.

With its strong overall performance, Imagry earns Frost & Sullivan's 2023 European Enabling Technology Leadership Award in the autonomous driving solutions industry.

What You Need to Know about the Enabling Technology Leadership Recognition

Frost & Sullivan's Enabling Technology Leadership Award recognizes the company that applies its technology in new ways to improve existing products and services and elevate the customer experience.

Best Practices Award Analysis

For the Enabling Technology Leadership Award, Frost & Sullivan analysts independently evaluated the criteria listed below.

Technology Leverage

Commitment to Innovation: Continuous emerging technology adoption and creation enables new product development and enhances product performance

Commitment to Creativity: Company leverages technology advancements to push the limits of form and function in the pursuit of white space innovation

Stage Gate Efficiency: Technology adoption enhances the stage gate process for launching new products and solutions

Commercialization Success: Company displays a proven track record of taking new technologies to market with a high success rate

Application Diversity: Company develops and/or integrates technology that serves multiple applications and multiple environments

Customer Impact

Price/Performance Value: Products or services provide the best value for the price compared to similar market offerings

Customer Purchase Experience: Quality of the purchase experience assures customers that they are buying the optimal solution for addressing their unique needs and constraints

Customer Ownership Experience: Customers proudly own the company's product or service and have a positive experience throughout the life of the product or service

Customer Service Experience: Customer service is accessible, fast, stress-free, and high quality

Brand Equity: Customers perceive the brand positively and exhibit high brand loyalty

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Our 6 analytical perspectives are crucial in capturing the broadest range of innovative growth opportunities, most of which occur at the points of these perspectives.

Analytical Perspectives:

- **Mega Trend (MT)**
- **Business Model (BM)**
- **Technology (TE)**
- **Industries (IN)**
- **Customer (CU)**
- **Geographies (GE)**

