**Literature Review: Path Following Bots**

Path following bots are robots designed to travel along specific routes without human intervention. Research has explored different ways to make these robots move accurately and safely.

Algorithms:

Scientists have developed various methods to help these bots follow paths. Some older techniques, like PID control, laid the groundwork. Newer methods, like reinforcement learning, use artificial intelligence to adapt better to different situations.

Sensors:

For these bots to navigate, they need sensors to "see" the world around them. LiDAR sensors create detailed maps, while vision-based systems using neural networks can recognize objects in real-time.

Real-World Use:

Path following bots are used in many industries. In warehouses, they help manage inventory efficiently. In farming, they navigate through fields, helping farmers monitor crops effectively.

Challenges and Future:

Despite progress, challenges remain. Bots still struggle with unexpected obstacles and rapidly changing environments. Future research might focus on combining sensor data for smarter decision-making or mimicking nature for better adaptability.

Conclusion:

The studies show how path following bots have evolved with smarter algorithms and advanced sensors. While they've become useful in many fields, there are still puzzles to solve, promising exciting developments ahead.

This simplified review provides a quick overview of how path following bots work, the technology behind them, their applications, challenges, and hints at future research directions.

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Literature review 1

Path following bots are like smart robots that follow a set path by themselves. Scientists use different clever ways to make them move correctly. They use special sensors, like eyes for robots, to understand the world around them. These bots help in warehouses and on farms, making jobs easier for people. Even though they're super helpful, there are still some tricky problems to solve, like dealing with surprises in their way. Scientists are working hard to make them even smarter for the future.

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Literature review 2

Scientists have been making cool robots called path following bots that can move on their own along specific paths. They use smart tricks to help these robots follow the path just right. To see where they're going, these bots have special sensors that act like their eyes. People use these bots in places like warehouses and farms to do important jobs. Even though these robots are really helpful, scientists are still trying to make them even better at handling unexpected things that might pop up in their way.

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