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Airport Accessibility

Self-driving wheelchair unifying transport devices to improve passenger autonomy in airports.

Researchers at Purdue University have created a new wheelchair design for enhancing airport accessibility. The standard right now is to use separate devices for wheelchairs, airport buggies, and aisle chairs for persons using a wheelchair in airports. The device developed by Purdue University promotes autonomy by functioning as all three traditionally employed devices in one. In addition, this wheelchair can drive itself to a passenger at an airport entrance and take passengers to their designated gates and even exact aisle seat, which could be anywhere on an airplane rather than typically allocated spaces. A series of sensors and processing units accurately and dependably control the wheelchair. The device is flexible for users, is cost efficient for airports, and in addition features an improved turn radius compared to apparatuses currently available in airport settings.

Advantages:

-Convenient

-Autonomous

-Cost Efficient

Potential Applications:

-Airport Accessibility

-Wheelchair Accessibility

Technology Validation: Working to conduct testing with FAA

TRL: 6

Intellectual Property:

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Category

Digital Health & Medtech/Assistive Robotics & Accessibility Systems

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