

Sector: Robotics
Sub-sector: Autonomous Mobile Robot
Established: March, 2018
Employees: 13
R&D Personnel: 6
Sales(\$) 150,000
Website: <http://www.hillslogis.com/>

Contact Information

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• COMPANY DESCRIPTION

We at the Hills Engineering are researching, developing and manufacturing Autonomous Mobile Robots (AMR) and their systems for fulfillment centers. We're working to help logistic centers overcome their challenges including increasing wages and decreasing working hours. Our products and services are well geared to raise productivity.

Our CEO Austin Park and CTO Yoon, Jongcheol have hands-on experience of logistics sector and profound understanding of how to run flows of work in the field. They were trained in one of the largest logistics company in South Korea with successful career. All of our C-level officers and the head researcher were trained in Samsung group, the largest group of conglomerates in South Korea which equipped them with know-hows of how to run projects, teams, business and company. Around 85% of our employees are researchers and developers which have propelled our rapid technological development.

Along with the advancement in logistics sector, we've been aimed to grow our presence in smart factory sector given the commonality between the two. We're looking for tech firms who can help our advancement and share success in logistics and smart factory sectors.

• MAIN PRODUCTS AND TECHNOLOGIES

Hills Engineering's main product is an autonomous mobile robots for fulfillment centers, Lorobot. It is designed to minimize unnecessary move of workers for raising work efficiency on the ground. For example, its top deck is positioned at around average workers' waist height so that they don't have to bend over to put on and off items on the robot. It moves around by itself without any attachment in the workplace. It can either go back and forth between point A and B to help workers or follow a worker while carrying items whose collective load is up to 100kg.

Our main technology is a hybrid SLAM and vision technologies. Hybrid SLAM is a technology to give a robot a capacity to move by itself with reasonable cost. A robot needs to know where it is for autonomous moving. The necessity requires 3D mapping, which in turn demands hefty 3D LiDAR. However, we can replace 3D LiDAR with 2D LiDAR whose price is one-tenth of 3D ones without big compromise of performance.

Vision technology is for a "picker-following" purpose. Given that fulfillment centers have many variables on the ground, logistics robots should be able to be operated flexibly. The best way to make it happened is making them follow a worker as it saves workers from exhaustive work of carrying of heavy items. Most robots cannot practically follow a worker but ours can. Because, unlike others, our robots can recognize a worker more accurately.

• REQUIRED TECHNOLOGY FOR COOPERATION

We're opened to anyone whose solution can be utilized in logistics or smart factory sector. It may be a vision solution or haptic sensors or whatever that possibly help us make a robust mobile cobots.