Booth No. **8.1B40.2**

SEOUL NATIONAL UNIVERSITY

Year Established	1946	Type of Business	Other
Website	https://en.snu.ac.kr/	Main Export Countries	US, EP, CN
SNS			
Main Customer	Domestic Customers	International Customers	
	Domestic Startups	International Startups	
The Person In Charge	Name	Department	Position
	MIRA LEE	Department of Strategy Business Support	Manager
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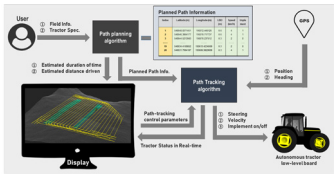
Company Description

Seoul National University (SNU) will participate for the second time in MWC 2025, where we aim to showcase our cutting-edge technologies and facilitate their entry into the global market. We invite you to explore the promising SNU's technologies. We look forward to connecting with you and opening new avenues for mutual growth.

Product

Path Planning and Tracking System for Autonomous Tractors Using Virtual Navigation Devices

Function and Usage : Autonomous driving hardware designed to enhance economic efficiency by converting existing agricultural machinery into autonomous vehicles without the need for new purchases. It utilizes a robust set of components suitable for agricultural environments to output accurate position and posture information. It is compatible with various types of agricultural machinery, including domestic and international tractors and rice transplanters. It supports software deployment through an Android OS-equipped display controller, ensuring versatility.

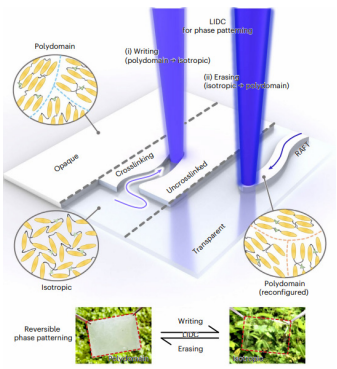


Marketing and Selling Points :

1. By utilizing GPS and IMU sensor fusion technology, a robust vehicle position and posture sensing system ensures centimeter-level positioning accuracy for autonomous agricultural operations, enhancing the competitiveness of domestic agricultural sensor fusion technology.
2. Development of a 3D autonomous farming tractor simulator that incorporates soil information, along with simulator-based algorithm development and field verification, ensures suitability and practicality for agricultural environments.
3. Field validation of autonomous agricultural operations is conducted based on a global path generation algorithm for irregularly shaped farmland.

Phase-Pattermed Liquid Crystal Elastomer

Function and Usage : This technology related to liquid crystal elastomer to control the isotropic phase locally and manage its transparency. It enables information patterns to temporarily disappear when the elastomer becomes transparent upon contact with human skin and reappear when it is detached and the temperature drops, facilitating reuse.



Marketing and Selling Points :

1. The phase of the liquid crystal elastomer region irradiated with the laser can be freely controlled by adjusting the laser process variables, and various optical and mechanical properties can be controled accordingly.
2. The proposed phase-patterned liquid crystal elastomer's phase transition temperature is about 34 degree, allowing phase transitions to occur through body temperature.
3. The proposed phase-patterned liquid crystal elastomer can be demonstrated that remote encoding of information patterns through light and show mechanical movement. It is considered to use in diverse fields such as actuators, soft robotics, sensors, optical devices and etc.