

Santa Clara University

Located in the heart of the Silicon Valley, the hub of the world's IT companies, Santa Clara University was founded in 1851 as the first private, four-semester university in California. While preserving the traditions of a devout Roman Catholic education, the university also focuses on practical fields such as business and engineering that are in keeping with the times.



Joint Project with Santa Clara University

These days, "open innovation" is gaining attention as an ecosystem that will give birth to the next-generation industries.

Open innovation is the process that accelerates the creation of internal innovation by using knowledge and know-how from the outside to achieve targets. In order to achieve sustainable growth over the mid- to long-term, MegaChips is working to launch new businesses through collaborations with companies and universities with cutting-edge technologies and ideas, mainly in the United States.

Here, we would like to explain about one such example, the joint project between MegaChips and Santa Clara University.

Background of Project Launch

Until now, the use of robots has been limited mainly to automated production scenes. What was required of robots at the production sites was the performance of predetermined actions with high precision and speed. In the future, we can expect to see the arrival of an era in which robots will be used in various fields and situations that have been difficult to automate, such as logistics, agriculture, and food products, as well as medical care and nursing care. Seeing this as a target that holds the key to the Company's future growth, MegaChips has added robotics as one of its new business targets. To expand our business in this market, it is necessary to have cutting-edge technology and know-how to realize our products.

In 2019, through its U.S. business advisor Mr. Balleto,

MegaChips formed a partnership with the SCU Robotic Systems Laboratory (SCU), a research institute at Santa Clara University with particular expertise in the field of robotics, to focus on the acquisition of cutting-edge IT technologies and. Thereby, we have launched a joint project with Santa Clara University in the field of robotics.



SCU Robotic Systems Lab

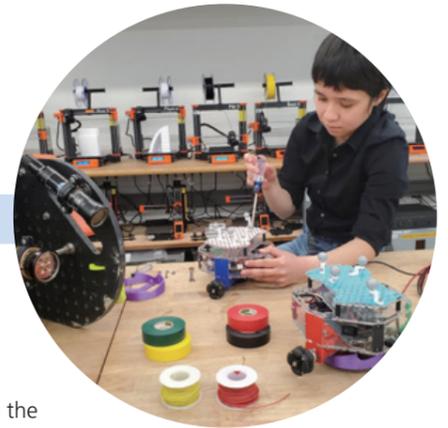
Projects (Technologies) Currently under Development

One of the key elements required in future robots is the ability to operate flexibly and accurately according to the surrounding environment and conditions. The robot needs to be able to accurately recognize the surrounding environment and conditions from various sensors, decide how to move based on its results, and accurately control the motor and other drive components in accordance with these decisions.

MegaChips had been examining the project's concept since January 2020 in this technical area and launched a

full-scale project in December 2020.

MegaChips is currently working on the development of a prototype for the proof of concept as well as suggesting to customers. The Company is also working closely with SCU on the project through implementing individual courses by Professor Kitts of SCU to our employees and support for the development of the prototype.



Future Outlook

Compared to closed innovation, where knowledge and information are kept within a company and within Japan, MegaChips believes this joint project with SCU offers very valuable discovery and is a meaningful initiative for the

Company. MegaChips will continue to move forward on this project and developing of enhanced products for a sustainable society where the synergies of humans and robots can be maximized.

MegaChips has set up a corporate venture capital (CVC) fund through investment by MegaChips LSI USA Corporation, its consolidated subsidiary, to promote the launch of new businesses in the MegaChips' target fields by forming strategic alliances and business investments with start-up companies having cutting-edge technologies and ideas, mainly in the United States. In the future, MegaChips will continue to grow this strategic new business by prompting the collaboration not only with robotics, but also with the automotive, industrial equipment, and communication infrastructure fields where markets are expecting to expand.



Professor Kitts has been providing detailed support to us from the initial stage of planning the project concept. His support covers not only technical aspects but also a wide range of areas related to the launch of a business, such as ideas for application study and advice for proposals to customers. This joint project has been a very stimulating opportunity for new discoveries and ideas. MegaChips will continue to work closely with SCU and Professor Kitts to move the project toward commercialization.



Mr. Balleto and Prof. Kitts

Motoaki Yasui
Project Leader
New Business Department

