ROBOTICS

LAKE SUPERIOR STATE UNIVERSITY

Sault Ste. Marie, Michigan

A rare opportunity for undergraduates

Lake Superior State University is one of only a few universities in the U.S.A. with a robotics specialization at the undergraduate level. It is available to students completing bachelor's degrees in computer engineering, electrical engineering, and mechanical engineering. Electrical engineering technology, manufacturing engineering technology, and industrial engineering technology majors have the option to earn a robotics technology minor. Companies that are involved in robotics and automation specifically seek out our graduates.

Robots on the move

We have three groups of robotic flow lines with vision systems, sensors, rotary index tables, and shared workstations. They are controlled by various software packages and programmable logic controllers.

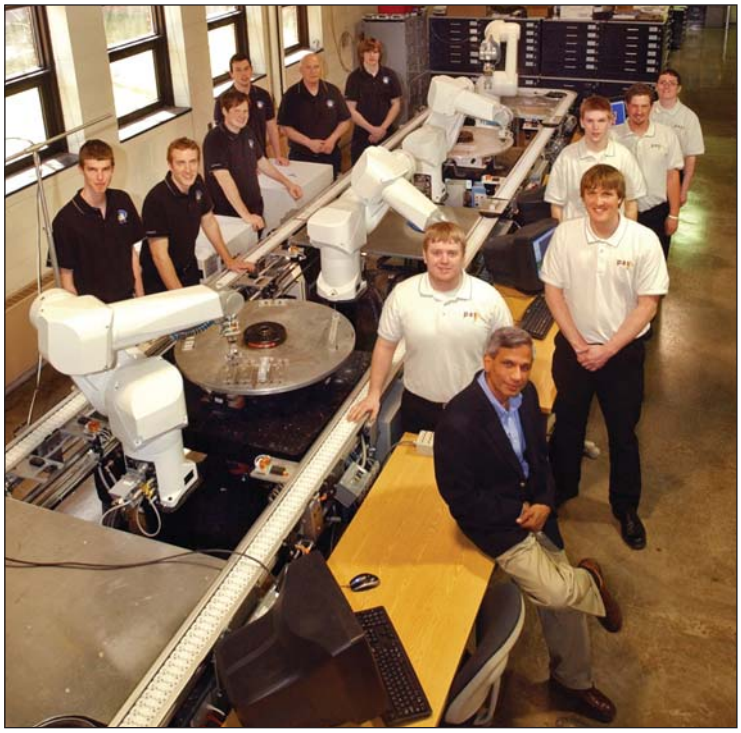
Staübli: Our four robots comprise an 8-station system. These are among the fastest and most articulated robots with six degrees of freedom. They are served by a Bosch continuous palletizing conveyor system, tool changing systems and end-of-arm devices. Students gain robotics systems integration training on this line.

Fanuc: Our "oval line" of four robots from the Arcmate family also work together as an 8-station system with a continuous conveyor system. Built by the world's largest robot manufacturer, Fanucs also have six degrees of freedom.

Adept: The three workhorses that make up the "circular line" are made by the only U.S. robot manufacturer. They are one of the most widely used selective compliance articulate robot arm (SCARA) type robots fitted with machine vision systems and cameras.

Motoman: Look for our smallest robot from one of the three largest robotics companies and one of America's fastest-growing.

Students begin to work extensively with industrial robots at the junior level. However, there may be earlier opportunities if you have the drive and desire to learn and work with the robots. There may even be a spot for you as a lab assistant or counselor during one of our summer robotics camps for gifted and talented young men and women.



Teams of senior projects replaced a robotic flow line with a series of Staübli robots, programmable logic controllers with DeviceNet, VAL3 software, Bosch conveyor system, vision systems, robotics tool changers, end-of-arm devices and various other sensors and components.

School of Engineering & Technology

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