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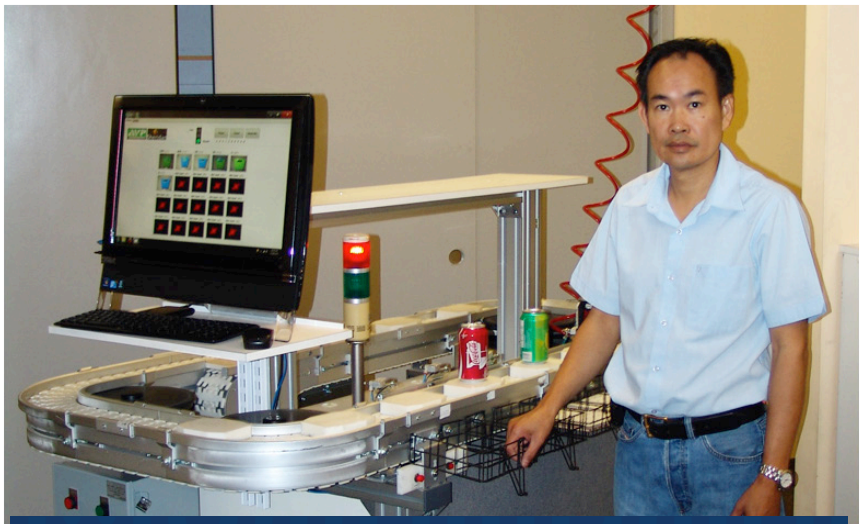
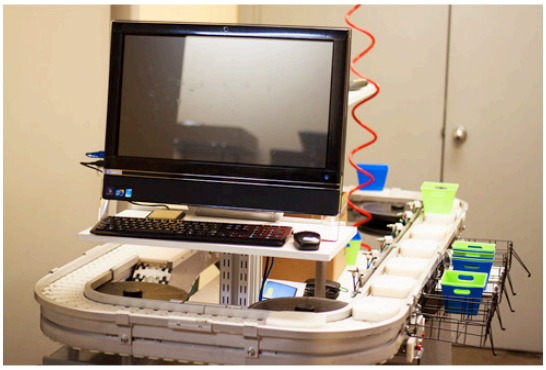
RESEARCH SUCCESS STORY





AVP and Sheridan:
Automated Clothing Sorting Line is the Right Fit

We all sort through things – change, receipts, bills – but in the manufacturing sector sorting is a fundamental process that needs to be done as efficiently as possible, or else it will consume precious time and money.

Charlie Thai knows the importance of sorting to any manufacturing business. He's the President and CEO of AVP Solutions – an inspection system company that develops automated sorting systems using lasers, electronic sensors and other advanced technologies.

Established in 1993 and now with eight employees, AVP's main clients are auto part manufactures. But with the auto industry struggling over the past few years, Charlie needed to diversify and expand to new markets in order to remain competitive.

There are still industries that rely primarily on manual labour for sorting, and that's where Charlie saw his opportunity. His vision was to create a new type of automated sorting line that worked on a conveyor belt. He knew his idea had potential, but he couldn't pursue it because of a lack of resources and funds needed to cover the necessary manpower. For such an idea to take flight, blueprints would have to be drawn up and complicated tests would have to be conducted.

What he needed was talent, funding and an industry that could use such a technology. He found all three with Sheridan College and the Federal Economic Development Agency for Southern Ontario (FedDev Ontario) and its Applied Research and Commercialization Initiative.

The ARC initiative matches small- to medium-sized companies with Sheridan faculty and students to conduct applied research, development and innovation activities that help companies become more productive, competitive and ultimately create jobs.

(Funding of up to $50,000 is matched by a 33% cash or in-kind contribution by the participating company.) Sheridan connected Charlie with a company that sorted recycled clothing, mainly by hand. Dividing the clothes by condition, type and size, their system was slow and costly, with constant bottlenecks. It could also be dangerous for the workers who were sometimes struck by foreign objects within the clothing.

> It's great working with people who have a passion for what they do. Sheridan's hardworking students are eager to learn and their knowledgeable professors are committed to developing their students' skills."
> - Charlie Thai, President and CEO, AVP Solutions

Under the direction of Dr. Farzad Rayegani, P.Eng., a professor with Sheridan's Faculty of Applied Science and Technology, six Sheridan students joined AVP for several months – a software programmer, as well as mechanical and electrical engineering students. "We're trying to assist small- and medium-sized companies grow by helping them develop technology that's accessible and affordable," said Farzad. "These students used their fundamental engineering principles from their studies at Sheridan and rose to the challenge of implementing them in a real industry system."

"They brought out fantastic ideas," said Charlie, who has since hired some of the students full-time to continue working on this project. "They helped build all the prototypes, and many of the circuit boards and mechanical drawings were done by the students as well."

The students' contribution was instrumental in moving this technology from a concept to a marketable automated clothing sorting line that is faster, more efficient and can cut manual labour by as much as 75%. Plans are underway to make this system market-ready by early 2012. Elements of the students' designs will also be integrated into AVP's current technology, improving the company's active sorting systems used by other industries.

"This technology has so much promise – it could be used for clothing, garbage and fruit, and several other possible industries," said Charlie.

AVP SOLUTIONS

Federal Economic Development Agency for Southern Ontario

Agence fédérale de développement économique pour le Sud de l'Ontario

Do you have a problem that needs solving? Contact us today to get started:
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