

The Future of Business in Pittsburgh

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Pittsburgh-Based Tech Company Acquired by French Tire Manufacturer Michelin

Michelin, the French multinational tire manufacturer, has announced its acquisition of RoadBotics, a Pittsburghbased company that spun out of the Carnegie Mellon University Robotics Institute in 2016. RoadBotics uses cameras, including those found on smartphones, to capture images of roads and public infrastructure and then analyzes those images with artificial intelligence to monitor their condition.

RoadBotics provides services to communities through their offerings RoadWay and AgileMapper, which can assess road conditions and make interactive maps of the findings. These maps can be used to prioritize maintenance and construction, increasing the safety of roadways and the efficiencies of local governments.

This acquisition will enable the RoadBotics team to combine their efforts with Michelin's DDi (Driving Data to Intelligence) group, which is described as "activity committed to analyzing data and driving behavior." A <u>recent</u> report from the Pittsburgh Business Times indicates that "DDI is looking to expand its North American presence and will set up a Pittsburgh office to do so."



A RoadBotics Road Inspection Vehicle in Pittsburgh (RoadBotics)

According to a Michelin press release, "with the acquisition of RoadBotics, Michelin strengthens its expertise in artificial intelligence supporting a smarter and safer mobility. Combining its unique knowledge of tire/vehicle uses, driving behavior analysis and RoadBotics computer vision expertise, Michelin is enriching its services and solutions offer portfolio to road managers helping them to optimize and secure road networks." Learn more at https://www.roadbotics.com/.

Founders of Self-Driving Pioneer Locomation Embody the "American Dream"

Pittsburgh's Carnegie Mellon University (CMU) is a world leader in robotics, AI and autonomy, so it's no wonder that it draws in experts from around the world. Among those experts drawn to Pittsburgh were brothers Çetin and Tekin Meriçli from Istanbul, Turkey, Alonzo Kelly from St. John's, Canada, Michael George from Queensland, Australia, and Venkataramanan Rajagopalan from New Delhi, India. These five people came to Pittsburgh "for the golden chance to be educated at the highest levels and work at the world's top university for robotics and artificial intelligence," and their story is <u>documented on the website of Locomation</u> - the company they went on to found.

Locomation is creating a future of autonomous trucks with a novel approach. Using their Autonomous Relay Convoy (ARC) technology, a truck operated by a human can lead a second autonomous truck following behind it. The trucks can swap leading positions, meaning that a new driver can take over, which results in an increase in the number of hours that a truck can be operational in a day.

Some of the knowledge that enabled these founders to visualize and implement this technology came from their work at CMU's National Robotics Engineering Center, where they "made priceless contributions to generations of Mars Rovers for NASA, and autonomous vehicle systems for the Defense Advanced Research Projects Agency (DARPA), the Federal Highway Administration, and mining and agricultural companies worldwide."

As their website states, "in the tradition of previous great American immigrant entrepreneurs, they started our company, and it is on track to be the first AV trucking technology company to deploy in safe, profitable commercial operations at scale across the United States. Their story is just beginning." Learn more at https://locomation.ai/.



A Locomation Autonomous Truck (Locomation)

Pittsburgh Business News and Updates

- Pittsburgh Leads a New Private Moon Race (<u>https://www.scientificamerican.com/article/a-new-private-moon-race-kicks-off-soon/</u>)
- New York Times Highlights Pittsburgh's Warehouse-Reinventing Robots (https://www.nytimes.com/2022/07/12/business/warehouse-technology-robotics.html)
- Fire Awards Honor Champions of Pittsburgh Innovation (<u>https://www.bizjournals.com/pittsburgh/inno/stories/awards/2022/07/26/fire-awards-2022-honorees-announced.html</u>)
- Carnegie Mellon University Rated "Best at Turning Knowledge into Market Power" (<u>https://www.forbes.com/sites/dereknewton/2022/07/17/new-college-ranking-of-technology-transfer-has-a-surprise-number-two/</u>)
- Pittsburgh-based biotech Novasenta, Developing Immunotherapies for Cancer, Lands \$40 million Series A (<u>https://www.bizjournals.com/pittsburgh/inno/stories/fundings/2022/07/29/novasenta-raises-40m-in-series-a-financing.html</u>)



About Ryan

Ryan O'Shea is a JETRO Investment Advisor focused on connecting Japanese companies to opportunities in Pittsburgh, Pennsylvania. He is the host of Future Grind, a podcast that explores the ethics and impact of emerging science and technology, and also works with the Pittsburgh Robotics Network. In 2017, Ryan co-founded an artificial intelligence startup that was named a Top 10 team in the IBM Watson AI XPRIZE. Ryan has represented NASA and CalTech's Jet Propulsion Laboratory as a Solar System Ambassador and serves both as a World Economic Forum Global Shaper and an ambassador for Pittsburgh AI. He is a graduate of the University of Pittsburgh & serves on the boards of multiple non-profit organizations.