

Behavioral Data Transforming Online Industry

University of Arizona



The Neuro-ID team takes a break to cool down from the summer heat at Tucson's Ventana Canyon. Photo credit: Neuro-ID

Neuro-ID sought to bring to the world a powerful new method for understanding online customer behavior. By analyzing how customers navigate and enter information when applying for a loan or buying a product – *how customers touch, type, and swipe* – its founders discovered that anomalous data entry could suggest possible fraud or poor usability of websites or apps.

“In one of our early projects, we used mouse cursor movements to identify frustrated online shoppers. We had an ‘a-ha’ moment when we envisioned using mouse cursor tracking and other methods of human-computer interaction such as typing on a keyboard or touching your smartphone as a method for not only assessing frustration but also assessing a person's credibility – and to do this at internet scale,” said co-founder and Management Information Systems (MIS) Professor at the [University of Arizona Eller College of Management](#) Joe Valacich.

“Some of our key findings were when we were able to detect things like emotion, decision conflict and hesitation as people are filling out online applications. Neuro-ID is currently processing 100,000 applications every day and we have hundreds of billions of metrics in our database that we draw upon to make decisions,” said co-founder [Jeff Jenkins](#), now a professor at [Brigham Young University](#).

This new source of rich behavioral data is highly predictive and is helping online businesses scientifically measure and better understand customer intent and emotion. Such insight into the digital customer journey is rapidly transforming many online industries and this patented technology is being used by many of the world's largest online brands and platforms.

Based on their research, Valacich and his then-Ph.D. student Jenkins worked with Tech Launch Arizona (TLA), the commercialization arm of the UArizona, to protect the intellectual property for the invention and form their new company, which launched in 2015.

“Neuro-ID and our work with Joe and Jeff is really a good example of what TLA can do with our investigators. It spans everything from the very early stages of getting them engaged with the whole commercialization process, with the protection of their ideas, and investing in those ideas to move them forward and get to a point where they get traction out in the market,” said TLA Assistant Vice President [Doug Hockstad](#).

Now, six years later, with a market-leading Behavior-as-a-Service (BaaS) platform and under the passionate leadership of CEO Jack Alton, Neuro-ID is servicing a rapidly growing number of online customers. As of December 2020, the company was facilitating over 500,000 customer interactions a day, and that number continues to climb.

“This all started as a university research project, but we’ve gone far beyond the science,” said Valacich. “We have built a company that helps people gain improved access to financial services. We’re helping organizations make better decisions by lowering risk and uncertainty. In sum, we’re helping individuals and businesses work better and smarter together.”

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