Two chance meetings have helped Galen Stetsyuk and Mikhail Sorokin enhance their skills at virtual reality game programming and increase their chances of marketing their innovations. The first was with entrepreneur and game programmer Brendan Iribe. The second was with TechPort Director Brad Bartilson.

As University of Maryland freshmen in 2014 the duo met Iribe, a UM alumnae and co-founder and CEO of Occulus VR, Inc. and Scaleform, who had just donated a record-breaking $31 million to his former school to build the Brendan Iribe Center for Computer Science and Engineering, which opened this past spring.

The chance meeting led Iribe to support Stetsyuk and Sorokin's idea to start a virtual reality (VR) club (now called the XR Club because it includes both augmented and virtual reality), at the university. The administration responded by providing a lab on campus and it was a game changer. Now they had access to a lab, a place to tinker with different game space, access to hardware and an opportunity to engage with students with similar interests.

They began working on their game, Core Disruption and as they worked, they developed an innovative technology that could have implications far beyond the gaming world. They founded their company, MPLEX, in 2015.

"We wanted to build a game with high graphic fidelity, a large scale multiplayer platform and a demonstrated reduction in simulation sickness," Stetsyuk says, noting that half of virtual reality players suffer from simulation sickness, regardless of their skill level. "It's an important issue to solve to make a wider appeal to VR games."

The process has been time consuming. They have started over from scratch three times because the underlying structure wasn't as reliable as they wanted it to be.

"We had a limited amount of time as full-time students, learning on our own and training new developers," says Stetsyuk, who continues to study Computer Science part-time while working on the startup. Sorokin graduated in 2018. "But the product has a very appealing replay-ability and high-level graphic fidelity."

They plan to go to market by 2020, and that's where the other chance meeting could turn into a game changer. The duo was asked by University of Maryland administrators to demonstrate at the Innovate Maryland conference in Baltimore. Not wanting to spend the time away from his product development, Stetsyuk says, "I almost didn't go." But it was here that he met TechPort Director Brad Bartilson. He was taken aback at Bartilson's interest and especially how in-tune with the game Bartilson was. "We had a deep discussion at that event and Brad expressed interest in working with us, especially working to get our technology into defense solutions," Stetsyuk says. "It seems very promising." Most recently Stetsyuk and Sorokin presented and were very well received at TechPort"s monthly LunchBox Talk Series in May and again in June at the TechPort Hangar Party where visitors had an opportunity to engage in the MPLEX VR experience first-hand.

Bartilson plans to use his expertise to identify and engage prospective customers for the MPLEX technology. "We are thrilled to be able to help these two extraordinary young entrepreneurs make the kinds of connections that will not only help MPLEX, but will potentially impact our future defense systems," Bartilson says. "The technology they have developed and are patenting now, could have significant impact in many applications."