

Synapse Technology Corporation

Synapse Technology uses state of the art deep learning and computer vision to automate the detection of objects on X-ray images. Synapse has close relationships with TSA, DHS S&T and Sandia National Labs, and we collaborate with aviation security stakeholders domestically and abroad. Synapse is beginning to apply its technology to cargo security and other customs & border patrol use cases.

The technology is currently deployed at checkpoints internationally, including airports, federal buildings and courthouses, where it is used to detect threats and alert operators to the presence of guns, gun parts, ammunition and various sharp objects. The application of this technology extends to detecting a wide variety of lethal threats or illicit objects that are of concern for border security, such as explosives, IED components, or specific types of currency. The platform is compatible with a wide range of screening equipment from all major manufacturers.

Border protection may also have an interest in quickly clearing certain items or baggage that do *not* pose a threat. For example, innocuous objects that are frequently flagged as incorrectly containing a threat, like a radioactive substance, slow down throughput and detract from security efforts elsewhere. Synapse's technology can be used to dramatically reduce these false positives. Additionally, when a new threat or illicit object emerges, Synapse can train its algorithms to be able to detect the new item of interest within weeks or months, thereby increasing the border's resilience to different threats.

Learn more about Synapse [here](#).