

Best Technical Advancement – Winner



Jason Lim
Transportation Security Administration

The Identity Management Capability portfolio at Transportation Security Administration (TSA), under Jason Lim's leadership since late 2018, is driving a strategic transformation at TSA via use of biometric and digital identity solutions.

Over the last 18 months, Jason has jump-started TSA's adoption of identity technologies that will impact how millions of travelers per day experience commercial air travel and aviation security for years to come. The project is a collaboration with a deep network of interagency and industry partners, including CBP, DHS S&T, NIST, standards organizations, airlines, airports, and identity technology providers.

Jason led the development of TSA's checkpoint identity verification platform, known as CAT-2 (i.e., second-generation credential authentication technology). This initiative built on TSA's previous efforts to automate and enhance the travel document checker (TDC) functions at TSA checkpoints. By incorporating a camera into the CAT platform, Jason enabled TSA to further secure the traveler identity verification process by automatically matching a photo of the traveler with the portrait on their authenticated physical ID (a process currently executed by TSA officers manually). When the COVID-19 crisis began, Jason quickly worked with TSA's vendor to incorporate self-service ID document scanning to reduce passenger—officer interaction. So far, TSA has piloted the CAT2 solution at airports in Washington, D.C., Miami, Phoenix, and Indianapolis with great success. An e-gate configuration of CAT-2, AutoCAT, is currently under development.



In preparation for a further round of testing at additional airports in late 2021 and early 2022, Jason has incorporated a digital identity reader into the CAT-2 platform, which enables passengers with a state-issued driver's license or digital identification issued by trusted private industry partners to use their smartphone rather than a physical ID. Additionally, he has partnered tirelessly with CBP to design a 1:n "touchless" experience for millions of DHS Trusted Travelers (e.g., TSA Precheck and CBP Global Entry). For these travelers, no boarding pass or credential requires scanning. Instead, a traveler simply has their picture taken and matched against a prepopulated gallery of enrolled facial images. This configuration is currently deployed at Detroit Wayne International Airport (DTW) for testing prior to scaling to additional sites. Notably, this solution will be extensible by participating airlines and airports for check-in, bag drop, and boarding, thereby enabling a streamlined travel experience from curb to gate.

Beyond the development of the technologies themselves, Jason has worked closely with DHS S&T and NIST to ensure that TSA's biometric solutions are built with privacy in mind, as well as being fair and equitable in terms of demographic performance. He recognized early on that widespread adoption of identity technologies in the aviation sector would depend on trust, transparency, and safeguarding privacy and civil liberties.

Jason has consistently advocated for a holistic approach to TSA's biometric and digital identity solution development to ensure all parties' needs are addressed. His technical acumen and inclusive, standards-based approach exemplifies his ability to implement innovative technologies on expedited timelines with a complex array of public and private sector stakeholders, all the while fostering open communication and collaboration in pursuit of transformational objectives.