



SOARING AHEAD

The Power of AI, Biometrics and Digital Identity in Aviation

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The future of air travel is where convenience meets cutting-edge technology. From biometric identity verification, gateless access, and predictive passenger flow management to automated check-ins and self-service options, airports and airlines must stay at the forefront of innovations to enhance passenger experience and safety.

Here are three key areas where leaders in the aviation industry are leveraging AI to transform airport operations in 2025 and the coming years:



Biometrics, Behavior Analysis & Automated Threat

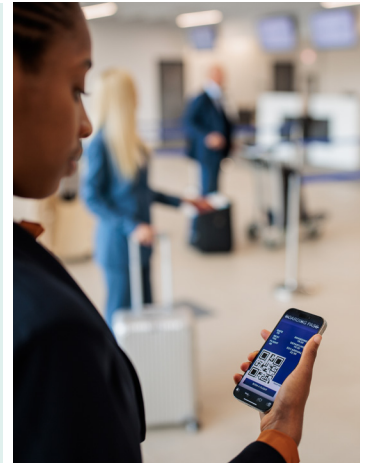
Unlock the future of travel with advanced facial recognition and digital identification solutions for passengers. By integrating behavior analysis, airlines and airports can significantly boost customer experience and automate threat detection, ensuring both safety and satisfaction.

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2

Streamlined Passenger Journey

Through predictive analytics, airports can forecast peak times, anticipate delays, and recommend optimal staffing and resource allocation. This proactive approach minimizes congestion and streamlines passenger movement. Self-service check-in speeds the end-to-end airport journey as airport automation vastly improves the travel experience. The result is reduced stress for both passengers and airport personnel.



Forecasting Maintenance

AI-powered predictive maintenance can address the challenges of disruptive breakdowns. By analyzing data from various sensors and systems, advanced technologies can predict potential failures before they occur, optimizing maintenance schedules, reducing costs, and extending the lifespan of valuable equipment.

3



IDENTITY REDEFINED. TRAVEL REIMAGINED.

NEC is continuously innovating to support the aviation industry in managing operations, while creating safer, more enjoyable travel experiences. We're helping clients meet the evolving demands of modern travelers and maintain their competitive advantage. In addition, AI-enabled systems are providing real-time insights for more efficient resource allocation.



Digital ID

Embrace the future with NEC's Digital ID solution, which is safe, secure, efficient, and privacy-focused. Travelers enroll using mobile devices by snapping a selfie and scanning their passport. Once registered, their face becomes a unique Digital ID used for multiple purposes, enabling secure, personalized, and interoperable identity profiles. From secure and easy check-in to touchless bag drop and a walk-through boarding process, the customer is always in control of sharing their Digital ID.



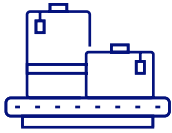
Smart ID Express

Remove traditional gates and barriers, reduce bottlenecks and wait-times without affecting security. NEC Smart ID Express combines convenience with secure access control as ticketed passengers walk through a virtual gate swiftly and securely. The system is built on face recognition technology ranked first for accuracy and speed*, to precisely track, identify, and match individuals in real-time.



Mobile Access

Revolutionize boarding with NEC's new mobile applications featuring high-tech, easy-to-deploy mounts, and off-the-shelf smartphones. Our proven mobile apps can be seamlessly deployed and operational at airline gates in just days, without significant infrastructure or overhead. This secure, automated passenger verification solution is designed to streamline boarding operations while maintaining the highest level of security and privacy. Deployed at several U.S. locations, agents have fast and secure passenger boarding confirmation at their fingertips, meeting U.S. Custom and Border Protection's biometric verification goals in partnership with airlines and airports. Additionally, agents are free to address more relevant passenger needs.



Baggage Analytics

Say goodbye to manual baggage counts with NEC's Baggage Analytics. The solution detects and identifies the number, size, and type of hand-carried baggage screened in real-time during the boarding process. This allows agents to truly focus on the customer experience while our innovative technology automatically tracks baggage counts and provides real-time overhead capacity alerts. Simply configure a bag count threshold and initiate gate checks as overhead capacity is reached.



Integration with Border & Immigration Security

Stay on top of rigorous border security requirements with NEC's Reveal, an industry-leading identity verification solution. Acknowledged by NIST* as the fastest and most accurate face recognition technology, Reveal's extensive image enhancement capabilities mean even poor quality images and video formats can be used for identification. Reveal is a cost-effective biometric solution built on Microsoft® Azure® and designed to lower total cost of ownership. Plus, **Everblu Algorithm**, lifetime algorithm updates, allows Reveal clients to get free algorithm and matcher upgrades without the need for a lengthy and expensive data conversion project.

This reimagined travel experience is not just a vision for the future - it's happening now. NEC is leading the charge towards a smarter, safer, and more efficient aviation industry.

To learn more about NEC's AI-enabled biometric solutions, traveler verification, secure transactions and frictionless traveler experiences, please contact Jim Nation (Jim.Nation@necam.com), NEC Business Development Manager, or visit <https://www.necam.com/Aviation/>.

*Ranked #1 since 2009 through 2024 in face recognition benchmark tests conducted by the U.S. National Institute of Standards and Technology (NIST).

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