

Ministry of Electronics & IT



UIDAI Seeks Real-Time or Near Real-Time Attack Detection Solutions to Defeat Deepfakes, Mask Attacks, and Spoofing in Aadhaar Face Authentication Across Demographics, Devices, and Environments; Applications open till 15th November 2025

Startups, Academia and Industry urged to Advance Aadhaar Security with AI-Powered Contactless Fingerprint Authentication and Mobile-Friendly Biometric Solutions

UIDAI launches Scheme for Innovation and Technology Association with Aadhaar (SITAA) to boost innovation, indigenization and codevelopment of advanced & future ready technologies in Digital Identity ecosystem

MeitY Startup Hub and NASSCOM Sign MoU with UIDAI as Strategic Partners to Further SITAA Objectives

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The Unique Identification Authority of India (UIDAI) has launched the Scheme for Innovation and Technology Association with Aadhaar (SITAA) to foster innovation and collaboration in the digital identity domain. The initiative aims to strengthen India's ID Tech ecosystem by enabling startups, academia, and industry to work closely with UIDAI. Through SITAA, UIDAI seeks to drive innovation, promote indigenization, and co-develop advanced and future-ready identity technologies.

The initiative will be a catalyst for collaboration, enabling the innovation ecosystem to build scalable, secure, and globally benchmarked solutions in the digital identity domain. The focus areas, among many, include biometric devices, authentication frameworks, data privacy, artificial intelligence and secure identity applications.

The SITAA scheme underscores India's commitment to building a secure, inclusive, and self-reliant digital identity ecosystem, creating new opportunities for innovators, researchers, and reinforcing trust in digital services.

To begin with, MeitY Startup Hub (MSH) and NASSCOM have signed MoU with UIDAI and would act as strategic partners for furtherance of SITAA objectives. MSH provides technical mentoring, incubation, and accelerator support, while NASSCOM offers industry connections, global outreach, and entrepreneurial support.

The SITAA program aligns with achieving national priorities of Atmanirbhar Bharat and Digital Public Infrastructure, ensuring a pipeline of secure, scalable, and future-ready identity solutions.

This program will be kick started through a pilot with few initial challenges specifically suitable for academic institutions, startups, industry partners. Entities who meet the eligibility criteria providing innovative solutions are encouraged to apply in this program. The applications to these challenges are open till 15th November 2025.

The challenges for the SITAA Pilot are as follows:

Face Liveness Detection:

This challenge invites startups to develop Software Development Kits (SDKs) for face-liveness detection using passive and active methods. Solutions must prevent spoofing attacks (photos, videos, masks, morphs, deepfakes, adversarial inputs), work across UIDAI's enrollment and authentication systems, ensure robustness across demographics, devices, and environments, support edge and server deployment, and minimize user friction through passive-first liveness.

<https://msh.meity.gov.in/challenges/home/7ab277c8-43f7-423b8edf-2e4acbbdcac2>

Presentation Attack Detection:

This challenge invites proposals from academic and research institutions to develop advanced Presentation Attack Detection (PAD) solutions that strengthen Aadhaar's face-based authentication ecosystem. It is designed to enable academia to innovate in AI/ML-driven PAD techniques that can detect a wide range of presentation attacks including print, replay, masks, morphs, deepfakes, and adversarial manipulations. The solutions must be accurate, privacy-compliant, and scalable, while supporting real-time or near-real-time detection across varied demographics, devices, and environments. Selected academic participants will contribute to advancing national-level biometric security research while ensuring user convenience, interoperability with Aadhaar APIs, and compliance with Aadhaar Act provisions.

<https://msh.meity.gov.in/challenges/home/35ed1bc3-26e1-4aef-99ee-3f759a530f55>

Contactless Fingerprint Authentication:

This challenge invites proposals to develop SDKs for Contactless Fingerprint Authentication using standard smartphone cameras or low-cost imaging devices. Solutions must capture high-quality images with real-time guidance, perform preprocessing and quality checks, detect liveness/spoofing, generate AFIS-compliant fingerprint templates, and run efficiently on edge/mobile devices. Deliverables include a demo mobile app for enrollment/authentication and a QC/Test tool to benchmark contactless captures against certified devices.

<https://msh.meity.gov.in/challenges/home/5f56490b947e-4893-b9da-fe11f15251ec>

The SITAA pilot opens the door for innovators to translate ideas into practical solutions that enhance the security, reliability, and efficiency of India's digital identity framework. By encouraging cutting-edge research and technology development, the program positions India at the forefront of global

identity innovation. Startups, academic institutions, and industry partners have the opportunity to contribute to building a future-ready, self-reliant digital identity ecosystem.

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