



MERA AADHAAR  
MERI PEHCHAAN

# Hiring of **Chief Technologist** for the National ID Program AADHAAR

World's largest Biometric database

Most Sophisticated Technology Architecture

## Introduction to UIDAI



**Unique Identification Authority of India (UIDAI)** is a statutory authority established under the provisions of the **Aadhaar (Targeted Delivery of Financial and Other Subsidies, Benefits and Services) Act, 2016 ("Aadhaar Act 2016")** on 12 July 2016 by the Government of India, under the Ministry of Electronics and Information Technology (MeitY).

Unique Identification Authority of India (UIDAI) was created with the objective to issue Unique Identification numbers (UID), named as "AADHAAR", to all entitled residents of India that (a) is robust enough to **eliminate duplicate and fake identities**, and (b) can be **used for authentication anytime anywhere** in an easy, cost-effective way.

Today AADHAAR covers more than 90% of the Indian population and is the de facto mode of service delivery for a **number of schemes and benefits**, both in the government and private sector. AADHAAR has the capability to **transform the way businesses run** and uplift the economy by **bridging the digital divide between rich and poor**. AADHAAR has received praise from various countries and international bodies including the **World Bank** for technological brilliance and curbing corruption leakages by linking benefits to AADHAAR.

UIDAI performs 2 primary functions to achieve the above objectives:

- **Enrolment:** The process of enrolling a resident into Aadhaar system and issuing a unique identification number.
- **Authentication:** The process of providing authentication response (Yes/No) upon submission of Aadhaar number and biometric/OTP/Demographic information to UIDAI.

## About Aadhaar

"Aadhaar" number is a unique 12-digit identification number which is linked to Indian resident's biometric data (fingerprints, IRIS and photograph) and limited demographic information.

By using following 4 types of Aadhaar based authentications an authorized agency can identify a resident or conduct e-KYC checks and provide benefits & services to the resident:

- **Biometric based authentication** – Uses Aadhaar number and fingerprint or IRIS to conduct authentication or e-KYC
- **OTP based authentication** – Uses Aadhaar number and OTP received on registered mobile to conduct authentication or e-KYC
- **Demographic based authentication** – Uses Aadhaar number and demographic information to conduct authentication or e-KYC
- **Multifactor authentication** – Uses Aadhaar number and multiple factors from the above / face authentication to conduct authentication or e-KYC

## Aadhaar Technology

AADHAAR is one of the largest enrolment and authentication ecosystem and also the most **sophisticated and complex technology infrastructures** across the world. The various technologies being used in AADHAAR relate to the field of **biometrics** such Automated Biometric Identification system, **fingerprint & face authentication** techniques, **Liveness detection** techniques, **Machine Learning**, **encryption**, **private cloud**, **Virtualization**, multiple database platforms including **Hadoop**, Data analytics, Public Key Infrastructure (**PKI**), latest **security technologies**, multiple **software platforms & frameworks**, Application programming interface (**API**), Web and mobile applications (android and ios), **staged event- driven architecture (SEDA)** etc.

## Background of the Requirement

UIDAI has a very strong technology team that has been supporting the various phases of Aadhaar program since inception. With the fast changing technology and increasing demands from stakeholders of newer initiatives, it is required that the technology arm of UIDAI is strengthened further and new technology projects are executed at a faster pace. In this regard **UIDAI has created a position of Chief Technologist** and intends to **appoint a highly qualified and experienced professional with proven experience in similar program, technology and scale to drive the various technology initiatives**. UIDAI invites applications for recruitment of Chief Technologist to further enhance the existing technology capabilities of UIDAI and drive new technology initiatives.

## What can the candidate expect from UIDAI

UIDAI promises to provide an opportunity to actively contribute to the largest technology initiative of its kind which has transformed and continues to transform the life of more than a billion people and learn from the vast experience over the last ~ 10 years of the program. This opportunity will be unique and unparalleled for the selected candidate, where the experience could be of immense help to the Digital India transformation initiative. What UIDAI promises is not just a job but an enriching and fulfilling experience. The candidate will be empowered to make significant contributions to the program.

## Roles and Responsibilities

### *Technical Responsibilities*

- Prepare UIDAI technology roadmap including both software and hardware ecosystems.
- Technology solution design for new services / systems or existing problems in UIDAI requiring technological solutions.
- Technology research and developments activities in UIDAI.
- Conceive, initiate and conduct proof of concept studies with forward-looking technologies to better meet the organizational goals of UIDAI.
- Propose PoC studies of innovative technologies to be executed by potential vendors.
- Translate the PoC results into production tools that can be deployed at UIDAI.
- Interact with government bodies, universities, standards organizations, industry associations, industry players and other outside agencies for solutions to technological problems faced by UIDAI.
- Advise various technology and security committees of UIDAI.

### *Administrative Responsibilities*

- Lead a team including software and hardware architects, product managers, engineers (Technology executives), and TSUs (Technology Support unit) to execute initiatives.
- May be required to work with Software development agencies (SDA) to run the PoC studies.
- Periodically monitor and review all technology projects for quality and timeliness.
- Participate in key technology decisions at UIDAI.
- Direct reporting to CEO, UIDAI





## Outcome Description

- Lead conception and implementation of technology projects as per defined timeline and quality
- Adopt best practices and newer technologies such as Machine Learning, Cloud etc. to improve the system
- Implement innovative and low cost technology solutions to solve problems
- Lead changes in existing technologies and migration activities
- Drive security objectives through technology solutions
- Thought Leader in Aadhaar and related technologies

### Qualification & Experience

#### 1. ESSENTIAL

- M.S./M. Tech. in Computers, IT or related subjects from top Global / Indian universities.
- B.Tech from one of the top engineering colleges in India or abroad.
- Should have at least 15 years of experience in IT and related fields and should have played major technology roles both in India and globally.
- Should have been awarded patents for innovative technologies, in individual's name or as part of organization's team with explicit defined role in the team.
- Should have published research papers in the field of Computers, IT or related subjects.
- Should have a proven record of leading technology transformation in organizations.
- Should be an Indian citizen or Overseas Citizen of India (OCI) / Person of India Origin (PIO).

#### 2. DESIRABLE

- Ph.D. in Computers, IT or related subjects from top Global universities.
- Experience should include public sector roles, global private companies, startups.
- Should have experience in conceiving, building and deploying large-scale software systems.
- Should have experience in building large scale biometric, ID or similar systems.
- Should have experience in Artificial Intelligence & Machine Learning to solve real world problems.
- Should have good interpersonal, communication and leadership

### Period of Engagement

- 2 years
- On successful completion of 2 years UIDAI may extend the contract.

### Location

- The position will be located at the Technology Center, UIDAI, Bangalore, India

### How to Apply

- Interested candidates should fill the Application Form and send the same along with their detailed CV to - [hiring@uidai.net.in](mailto:hiring@uidai.net.in)
- Those, who have applied earlier against this post and fulfilling the revised eligibility criteria, need not apply afresh.
- CV must contain complete details of qualification and experience

### Hiring Process

- CV shortlisting based on the criteria
- Interview with the Panel of experts appointed by UIDAI
- Selection and Contract signing with UIDAI
- Remuneration and other terms of contract will be negotiated with the selected candidate