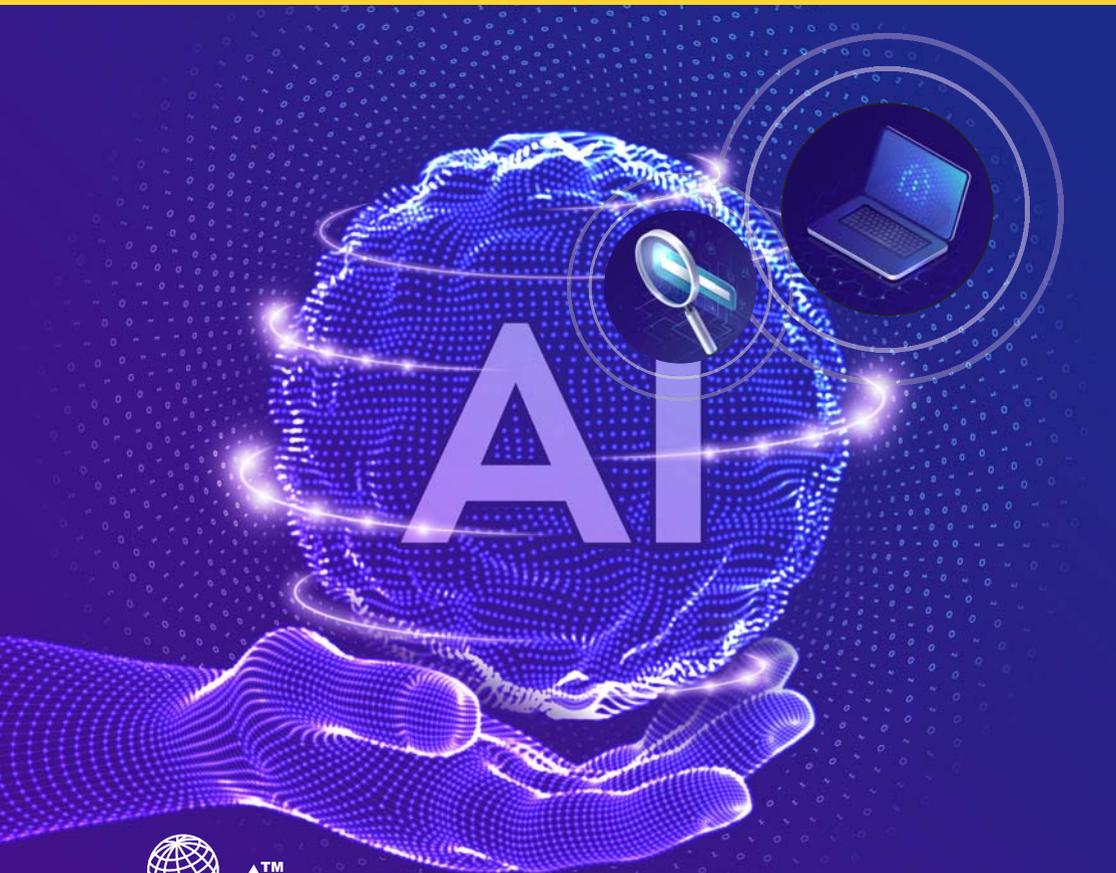


# AI in Financial Services

*A Primer for Internal Audit and Fraud Detection*



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# From the desk of IIA India President

I am happy that one more book, this time on ‘AI in Financial Services’, is being released under the aegis of the IIA. I am more happy see the lucid and personal form and structure in this book which appeals to the ordinary reader. That does not, in any way, diminish the substance and depth that the authors have lent, no doubt a product of their vast knowledge and long experience in the domain.

The book will serve as beginners and practitioners alike in the way the subject has been dealt with and I am sure that the profession and the professionals will gain from the content. While the financial services sector is not new to us, AI still is. Although at a nascent stage, AI is rapidly gaining currency owing to its immense potential in easing business interactions by driving outcomes through greater objectivity and accuracy. Generally, auditors look at AI as an ally for the same reasons.

*Quis custodiet ipsos custodes?* While auditors work with this ‘ally’, we will need to skill ourselves to be able to audit the ‘intelligence’. AI too has, contradictorily, a proclivity to fraud: sophisticated but high impact, owing to the nature of deployment. Our responsibility as auditors, to provide assurance in this matter to stakeholders, takes a quantum leap.

Let’s get ready for it.

IIA is thankful to the authors – Raman Narasimhan, A R Parthasarathy and Aditya Kumar S – for their superlative effort and presentation. As a professional, I am grateful for it.

**R. Ramarao**  
President, IIA India

# Prologue

Mirra is visiting Chennai for the first time after she joined a leading Artificial Intelligence (AI) Company Madras.AI. Mirra is thrilled to work in a world where the boundaries of technology edge are broken continuously. Madras.AI is a pioneer in artificial intelligence innovation, with AI technologies built with industrial applications for a safer, healthier and faster world. The teams are engaged in fundamental research of artificial intelligence to find comprehensive solutions for the machine vision with an aim always to make breakthroughs in computer vision, natural language understanding, voice recognition, knowledge reasoning and robotics. Madras.AI has wide presence in the financial services market. The company is named already in the CNBC's "Top 50 Disruptors List". The key tasks set out for Mirra by Aakash, a senior who started working with Madras.AI from 2019 includes exploring how they can make together Chennai an intelligent city through integrating advanced AI Technologies with business application scenarios for the financial services industry and how to make fraud detection possible through AI. Together, they worked on the smart solutions for the financial industry that cover all aspects of the finance to address each subfield and user scenario; to provide the shift to an intelligent financial industry in Chennai. They started with a smart outlet solution which could identify customers and manage outlets, cardless ATM that facilitate cash withdrawal with facial recognition.

The smart solution facilitates the following features:

- Identify a customer entering the Bank
- Provide access to the customer through facial recognition (contactless)
- Intelligent reception system using voice, NLP and facial recognition
- Direct the customer to the service area based on the need (like transfer, investment, locker room, etc.,)

## About the Authors



**Raman Narasimhan** works for Sundaram Finance as Head of Internal Audit. He has substantial audit, forensics and dispute consulting experience of more than 25 years. He has rich experience in Anti Money Laundering (AML), digital forensics, cyber forensics per SEBI / RBI frameworks, standards including the information security, privacy, environmental security, etc., Has modelled privacy governance, carried out impact assessments, and advised on the data classification. Prior to joining Sundaram Finance as Head of Internal

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