

The IEEE Applied Artificial Intelligence Systems (AIS) Risk and Impact Framework Initiative

Industry Connections Activity Initiation Document (ICAID)

Version: 0.1, 28 April 2020

IC20-006-01 Approved by the IEEE SASB 4 June 2020

Instructions

- Instructions on how to fill out this form are shown in red. It is recommended to leave the instructions in the final document and simply add the requested information where indicated.
- **Shaded Text** indicates a placeholder that should be replaced with information specific to this ICAID, and the shading removed.
- Completed forms, in Word format, or any questions should be sent to the IEEE Standards Association (IEEE-SA) Industry Connections Committee (ICCom) Administrator at the following address: industryconnections@ieee.org.
- The version number above, along with the date, may be used by the submitter to distinguish successive updates of this document. A separate, unique Industry Connections (IC) Activity Number will be assigned when the document is submitted to the ICCom Administrator.

1. Contact

Provide the name and contact information of the primary contact person for this IC activity. Affiliation is any entity that provides the person financial or other substantive support, for which the person may feel an obligation. If necessary, a second/alternate contact person's information may also be provided.

Name: Rumman Chowdhury

Email Address: rumman.chowdhury@accenture.com

Employer: Accenture

Affiliation: Accenture

2. Participation and Voting Model

Specify whether this activity will be entity-based (participants are entities, which may have multiple representatives, one-entity-one-vote), or individual-based (participants represent themselves, one-person-one-vote).

Individual Based.

3. Purpose

3.1 Motivation and Goal

Briefly explain the context and motivation for starting this IC activity, and the overall purpose or goal to be accomplished.

In accordance with the evolving regulation around Artificial Intelligence Systems (AIS), this group would understand and propose an applied risk framework or assessment. In order to achieve these goals, the group would understand existing risk approaches in the fields of finance, cybersecurity, and more, identify gaps introduced by AI, and determine an approach to create a fit-to-purpose applied assessment for AI to determine riskiness and identify approaches to mitigate risk.

Goals for this IC include the creation of a general platform for AIS risk assessment reports, white papers, the development of multiple PARs (likely as Recommended Practices or Guides versus Standards) and general coordination activities with leading global policy makers and organizations.

3.2 Related Work

Provide a brief comparison of this activity to existing, related efforts or standards of which you are aware (industry associations, consortia, standardization activities, etc.).

- SR 11-7 guidelines in financial risk management (from 2011) <https://www.federalreserve.gov/supervisionreg/srletters/sr1107.htm>
- European commission white paper on AI: https://ec.europa.eu/info/sites/info/files/commission-white-paper-artificial-intelligence-feb2020_en.pdf
- UK ICO AI audit guidelines draft: <https://ico.org.uk/about-the-ico/news-and-events/ai-auditing-framework/>
- Brazil's LGPD (Data protection law): <https://iapp.org/resources/article/brazils-general-data-protection-law-english-translation/>

3.3 Previously Published Material

Provide a list of any known previously published material intended for inclusion in the proposed deliverables of this activity.

N/A. References to existing work (eg above) will be included but not actual copywritten material.

3.4 Potential Markets Served

Indicate the main beneficiaries of this work, and what the potential impact might be.

- Financial Industry: Having a common set of recommendations around Risk Assessment Frameworks can drive coordination of data and other critical information within and between countries. Where these frameworks eventually

lead to (IEEE) standards, these Frameworks could also eventually be certified as well.

- Other identified high-risk industries or applications: Pharmaceuticals, Transportation (autonomous vehicles), Human Resources, Public Sector/Government
- Policy Makers: Frameworks, Standards and Certification around assessments of these kind can drive coordination of global markets, facilitating ease of data and other critical information flows.
- End Users: Banking clients (as individuals or citizens) will benefit from frameworks designed to encourage transparency, accountability and an eradication of bias.

3.5 How will the activity benefit the IEEE?

The current goal of this IC is to design initial frameworks as reports that can be collected together into one main “Playbook” or document along the lines of *Ethically Aligned Design (EAD)*, created by the IEEE Global Initiative on Ethics of Autonomous and Intelligent Systems (another IC program). By providing key documents as part of this IC Program to be made available in a “Request for Input” format (as with EAD), the number of members and community created by this IC will increase in size over time, positioning IEEE and IEEE-SA as thought leaders in the technical and ethical aspects of AIS as it relates to the Finance Industry.

It is also assumed multiple webinars, live events, and media opportunities will surround this IC work, helping to further bring attention and members to the community, documents, and PARs being created.

4. Estimated Timeframe

Indicate approximately how long you expect this activity to operate to achieve its proposed results (e.g., time to completion of all deliverables).

Expected Completion Date: 06/2022

IC activities are chartered for two years at a time. Activities are eligible for extension upon request and review by ICCom and the IEEE-SA Standards Board. Should an extension be required, please notify the ICCom Administrator prior to the two-year mark.

5. Proposed Deliverables

Outline the anticipated deliverables and output from this IC activity, such as documents (e.g., white papers, reports), proposals for standards, conferences and workshops, databases, computer code, etc., and indicate the expected timeframe for each.

- AIS Risk Assessment Framework Master Document including chapters focused on:
 - Finance
 - Cybersecurity
 - Human Resources
 - Pharmaceuticals and Health Care

- Autonomous Vehicles
- Public Sector/Government
- A minimum of two PARs focused on standardizing Risk Assessment Frameworks outlined in the master document
- Multiple webinars and live events

5.1 Open Source Software Development

Indicate whether this IC Activity will develop or incorporate open source software in the deliverables. All contributions of open source software for use in Industry Connections activities shall be accompanied by an approved IEEE Contributor License Agreement (CLA) appropriate for the open source license under which the Work Product will be made available. CLAs, once accepted, are irrevocable.

Will the activity develop or incorporate open source software (either normatively or informatively) in the deliverables?: **No**

6. Funding Requirements

Outline any contracted services or other expenses that are currently anticipated, beyond the basic support services provided to all IC activities. Indicate how those funds are expected to be obtained (e.g., through participant fees, sponsorships, government or other grants, etc.). Activities needing substantial funding may require additional reviews and approvals beyond ICom.

There are no funding or expenses needed at this time besides IEEE resources to support webinars, etc.

7. Management and Procedures

7.1 Activity Oversight Committee

Indicate whether an IEEE committee of some form (e.g., a Standards committee) has agreed to oversee this activity and its procedures.

Has an IEEE committee agreed to oversee this activity?: No

If yes, indicate the IEEE committee's name and its chair's contact information.

IEEE Committee Name: Committee Name

Chair's Name:

Chair's Email Address:

Additional IEEE committee information, if any. Please indicate if you are including a letter of support from the IEEE Committee that will oversee this activity.

IEEE collects personal data on this form, which is made publicly available, to allow communication by materially interested parties and with Activity Oversight Committee and Activity officers who are responsible for IEEE work items.

7.2 Activity Management

If no Activity Oversight Committee has been identified in 7.1 above, indicate how this activity will manage itself on a day-to-day basis (e.g., executive committee, officers, etc).

An Executive Committee will be created, following the model of how The IEEE Global Initiative on Ethics of Autonomous and Intelligent Systems evolved.

7.3 Procedures

Indicate what documented procedures will be used to guide the operations of this activity; either (a) modified baseline *Industry Connections Activity Policies and Procedures*, (b) Standards Committee policies and procedures accepted by the IEEE-SA Standards

Board, or (c) Working Group policies and procedures accepted by the Working Group's Standards Committee. If option (a) is chosen, then ICCom review and approval of the P&P is required. If option (b) or (c) is chosen, then ICCom approval of the use of the P&P is required.

Modified baseline *Industry Connections Activity Policies and Procedures*.

8. Participants

8.1 Stakeholder Communities

Indicate the stakeholder communities (the types of companies or other entities, or the different groups of individuals) that are expected to be interested in this IC activity, and will be invited to participate.

- Banks / financial institutions
- Consulting firms workwith with banks / financial institutions
- Policy makers focused on financial regulation
- Regulators
- Representatives of end users / banking customers
- Similar demographics for other high-risk industries/applications: HR, Pharmaceuticals, Autonomous Vehicles, Government

8.2 Expected Number of Participants

Indicate the approximate number of entities (if entity-based) or individuals (if individual-based) expected to be actively involved in this activity.

Minimum 30-40 individuals within twelve months of first Executive Committee meeting.

8.3 Initial Participants

Provide a number of the entities or individuals that will be participating from the outset. It is recommended there be at least three initial participants for an entity-based activity, or five initial participants (each with a different affiliation) for an individual-based activity.

Use the following table for an individual-based activity:

Individual		Employer	Affiliation
Rumman Chowdhury	Confirmed	Accenture	Accenture
Shekar Katuri	Invited	Bank of America	Bank of America
Pavel Abdur-Rahman		IBM	IBM
Ali Shah	Invited	ICO	ICO
Mona Sloane	Confirmed	NYU Public Interest Technology Alliance	NYU
Irene Pak	Invited	Bristol Meyers-Squibb	Bristol Meyers-Squibb
Alexander Foard	Confirmed	City of New York	City of New York
Brian Hofer	Confirmed	Secure Justice	Secure Justice
Miles Brundage	Confirmed	OpenAI	OpenAI
Carly Kind	Invited	Ada Lovelace Institute	Ada Lovelace Institute
William Isaac	Invited	DeepMind	DeepMind
TBD	Invited	HSBC	HSBC
Tim O'Brien	Confirmed	Microsoft	Microsoft
Joshua New	Invited	IBM	IBM