

2024-2025 SIG Topic Proposals

Artificial Intelligence SIG

Introduction

The key focus of this group is to delve into the pivotal aspects of Artificial Intelligence, acknowledging its rapid and influential adoption. The intentions are to contribute to the international discourse on AI and address the emerging global challenges.

We intend to explore crucial areas such as AI security, highlighting ethical considerations like data bias, accessibility and inclusion, transparency, regulation, and cultural sensitivity, and addressing the potential misuse of AI technologies.

We aim to look into capacity building for AI readiness, through various means such as education, training, and public-private collaborations, as well as the crucial aspects of data governance and privacy in the age of AI.

The SIG's objective is to consider these issues globally, acknowledging the nuances and challenges presented across various regions.

What types of activities will you conduct?

Our activities will include webinars, research initiatives, roundtable discussions, and hackathons. These activities will foster collaborations, encourage professional development, and stimulate discussions on AI readiness, safety, innovation, and its socio-economic impact.

Why You Should Select This Topic?



Passionate about the future of AI? Be part of our Special Interest Group and help shape the next era of AI. Be a changemaker in the AI revolution. Join the discourse shaping the future of AI globally. Get involved today!

ISOC Retrospective SIG

Introduction

Celebrate the upcoming 35-year anniversary of the Internet Society by looking back and looking forward. This SIG seeks to evaluate the policy direction from the early days of the Internet Society. What has been achieved? What would members do differently?

Many original members are reaching (or have reached) retirement age. Now is the time to gather their memories, knowledge, advice, and concerns and archive this material for future endeavors. This is an opportunity for different generations to share perspectives and reflect upon an interesting period in history.

This work could be useful to ensure emerging technologies benefit everyone, everywhere. As Internet technologies evolve and expand, the world might encounter policy dilemmas not unlike those from the early days of the Internet (e.g., when bringing the Internet to regions where current Internet access is low, when creating policy for new types of Internet such as The Physical Internet or the Energy Internet, or when addressing concerns that arise with the development of the Internet of Things or AI-enhanced Internet). Failure to enact good policies for these developments could have a profound impact around the world, potentially increasing inequality or increasing greenhouse gas emissions. Such projects could benefit from the organizational principals and policy-making processes of an organization like the Internet Society.

Objectives:



- Add to archives of early Internet Society history
- Community building
- Policy review for future endeavors

What types of activities will you conduct?

Review, evaluate, celebrate, learn from, and reminisce about the Internet Society's first decade (1992-2002) as an advocate for the Internet.

Why You Should Select This Topic?

Participating in the ISOC Retrospective SIG is an opportunity to tell a great story about the origin of the Internet Society and hopefully lay the foundation that creates more great stories of guiding future technology that serves everyone, everywhere.

Cryptology SIG

Introduction

Cryptology involves both cryptography and cryptanalysis. In basic terms, cryptography deals with creating secure codes while cryptanalysis is the art and science of breaking such codes. The four pillars of cryptography are integrity, confidentiality, authenticity and availability. The first three concepts relate to data being transmitted and the parties involved. The last pillar pertains to the service or services that provide the given transmission. A practical example is the RSA algorithm or public-key cryptography used for ecommerce. On the other hand, an example of cryptanalysis concerns the breaking of a military communication device used by Germany during World War II. Such machine called Enigma was decoded by Allied Forces as a result of intellectual ingenuity but also luck. Presently, cryptology has changed significantly because at the core of modern cryptography are unsolved mathematical problems. In other words, if such problems could be easily solved then our codes would no longer be secure



but since nobody has achieved that we consider our codes to be safe. In conclusion, our objectives are:

- 1) Realize that cryptology is a multidisciplinary domain which is evolving very fast;
- 2) Define how new concepts such as cyberweapon and others should be written in English;
- 3) Understand how cryptology is considered in every country and region;
- 4) Provide basic training on cryptology and other related matters such as cryptoagility;
- 5) Contribute to local discussions to raise cryptology awareness among all sectors of society;

Cryptology is used in secure software development, network security, cybersecurity, blockchain technology, mobile and cloud security, biometrics, digital forensics, financial technology, military and defense, government and diplomacy, aerospace and aviation, energy sector, healthcare information security, supply chain security, information security, Internet of Things and other sectors. Its global significance is of utmost importance to both humans and property.

What types of activities will you conduct?

The first activity consists in contacting the local chapters to conduct a survey in order to understand how cryptology is perceived within that country. One possibility is to organize national meetings to gather experts open to the general public.

The second activity is to elaborate a list of what is needed and how to obtain it. Such may include necessary documentation, equipment (hardware and software), etc. This may require the creation of webinars.



The third activity is to devise a preliminary schedule of the actions that must be done in order to set in motion this necessary change in both mentality and attitude. Such will require different types of events.

Why You Should Select This Topic?

Select Cryptology SIG for the next topic because it is at the heart of all digital security. Get involved to deepen your knowledge, collaborate on the latest research and meet others that think alike. Together we can make our online world a more secure place for everyone. Join us now!

Humancentric AI SIG

Introduction

Human Centric AI; technology, socio-economics, cyber security and international trade systems, have particular requirements to support the needs of natural persons via technologically defined solutions, sought to be defined via 'commons' works, to act as a force of good for human rights.

The intended purpose was twofold;

To support 'consciousness', human rights & equitable supports for rule of law;
To ensure support for peaceful resolution of disputes through the use of electronic evidence.

Whilst there are competing definitions of 'Human Centric AI', as is also now the case for the term 'web'.

The construct of the term 'human centric' (ai) was defined in relation to W3C Works that via various group efforts sought to create the building-blocks needed to make available as an option, the means to elect to use systems whereby the management of information and



thereby support for the empowerment of human rights and law; be defined in such a way, whereby human beings were provided the means to define and be supported in managing their own human agency electronically, and that of anyone whom they owe responsibilities of guardianship (ie: parents / kids).

W3C Works have matured and now, the social factors needs to be addressed, which will undoubtedly lead to more technical work. The outcomes provide the means to support natural persons as foundational tenants for the use of the peoples internet, as a tool and media system for human rights supports. These works intend to employ IPv6, DNS (ICANN), WWW (W3C)/Semantic Web (RDF) and various emergent protocols; whilst also redesigning email & other 'identifier' systems, supported by personal ontology and personal software agents.

There are many differences, the job of this SIG is to work through them.

The broader outcome sought; is advancement to a knowledge age peacefully, dignifying goals stated by Vannevar Bush & many others thereafter.

What types of activities will you conduct?

A W3C 'human centric ai' group has been established, and this is intended to support the extension of those works.

The activities are thought to be as follows;

Definitions: The means to,

define a particular framework for defining what 'human centric ai' is technically progress works to define 'safety protocols' sought to be brought about for it.

Interoperability, portability and other linked issues are considered to be amongst the 'safety protocols' scope of works.



Use-Cases: illustrating examples,

The process will involve people illustrating future 'visions', or creative works that are intended to be supported by 'human centric ai' systems; and thereby, circulated and advanced by empowered participants who thereby get involved in defining requirements, undertaking SWOT analysis, etc.

Policy Work

IF people are to be provided the means to manage their own personal lives via internet; then, there are various requirements, including IPv6 subnets, ICANN Domain names, Cryptography requirements, etc.

There are also various social requirements; such as the means to address bad actors in ways that conform to human rights principles and/or traditional considerations, as now need to be transposed to support this digital transformation series of requirements.

There is advocacy work required in regions around the world, inter-domestically, to ensure key policy and decision makers locally are aware of these options that are different to how people use 'internet' today, whether they understand the difference between an application such as facebook, the web & internet; or not.

There are very significant discussions to be had about the nature and notion of 'identity'; who we are as individuals and what our basic needs are, to be provided peaceful support for self-determination and in-turn also, what requirements are necessary for accountability & how can these systems be defined ontologically.

There are also very significant works needed to define supporting apparatus, that would seek to empower personal & private human centric - ai agents; with 'commons' knowledge required to support the function of those agents / software; which in-turn, should be achieved without 'digital slavery' practices, processes or supply / distribution chain implications. As is distinct to recreation or sleep; Many people spend time doing work online,



so how can this be socioeconomically articulated both in support of human rights and in-turn consequently also, taxation systems to supports for civic infrastructure works

As a human family and how we may be defined by what it is that we do, to positively impact others.

The measures of these works are expected to support the new definition of a billionaire; he or she who positively impacts the lives of a billion people. It is hoped that this may be an attribute that is made possible for many, irrespective of where they are born in our world.

It is understood that WHO is seeking to immediately progress 'digital identity' works for health.

The belief is that the production of medicinal environments can yield far better outcomes than pharmaceuticals via digital identifiers, alone. Human Centric AI in the intended constructs; yields means for the ontological designs of our works, infospheres, inforgs and through our sociosphere efforts to produce a 'knowledge age' our biosphere relationships.

Yet there are many challenges, which reflects the lack of effective prior works in the many areas that now need to be addressed. For works relating to Human Rights / digital humanitarian infrastructure, these works are focused upon seeking to ensure fair compensation for useful works; only.

As to; both,

- eradicate 'digital slavery',
- negate 'royalties' or other usury problems
- support the ability to deliver 'obligation free' outcomes, morally.

Why You Should Select This Topic?

In-order to progress our humanity towards a Knowledge Age, we need 'Human Centric AI' technology.



Whoever delivers these outcomes; will yield better Cyber-Security, Human Rights supporting Socio-Economic Infrastructure to radically transform productivity capabilities. So lets do it together; as members of our Human Family, here on Earth: https://www.youtube.com/watch?v=IHB_G_zWTbc