# **Call for Papers**

Themed Series of APSIPA Trans. on Signal and Information Processing on "Multi-Disciplinary Dis/Misinformation Analysis and Countermeasures"

With the pervasiveness of social networks and media, digital information (health, climate, political, news articles, etc.) can be easily created and shared online by individuals, includes people and bots. This significantly changes how humans access, search and perceive information. More people are making their economic, political, health and daily life decisions by referring to online information due to its convenience and low cost. Yet, online social media has become a battleground for malicious attackers to fabricate and propagate massive amounts of disinformation, with the participation of massive groups of people online (leader-follower feedback loops). This is often referred to as the "info-demic". The uncontrolled rapid propagation of disinformation can lead to severe consequences such as financial losses, hostile online environments, damaging people's confidence in trusting online information, and even endangering people's lives.

Dis/misinformation is a complex problem which cannot be well addressed in one traditional discipline. There is an emerging need for researchers of multiple disciplines (e.g., computing, communication, journalism, social psychology, law, etc.) to have a joint forum to understand the disinformation propagation mechanism, how people evaluate the authenticity of online information, and investigate potential solutions to combat info-demic. This themed series aims to provide a venue to facilitate idea exchange among researchers of relevant but diverse disciplines. Inter-disciplinary studies are especially welcomed. Interesting topics include but are not limited to:

## Information aspects

- Definitions of information trustworthiness, authenticity, and/or credibility
- Detection and prediction of dis/misinformation and bias
- New approaches to extract ground truth or labeling information
- o Defining and detecting/classifying boundaries of journalistic behavior online
- Suitability of news content from journalistic entities to surface ground truth

#### User aspects

- Definitions and analysis of online authentic behavior
- Human behavior analysis against dis/misinformation in social media
- Human behavior regulation on political disinformation
- Compatibility of regulating social media content with freedom of expression
- Studies on mechanisms of trust establishment
- Application of moral foundations & ethical frameworks to "participatory disinformation"
- Analysis and comparison of human performance in the face of DeepFake media

### Propagation/Communication aspects

- Dis/misinformation (e.g. health, news, political, climate) propagation mechanism
- Data-driven approaches on propagation patterns
- Connections or relationships between propagation and authenticity

#### Model aspects

Countermeasures against formation and circulation of dis/misinformation

- Explainable AI for detection of dis/misinformation
- New datasets and evaluation methodologies for dis/misinformation identification
- DeepFake media (e.g. image, video, audio) generation and detection
- o Artificial intelligence chatbots as information assistant or opinion influencer
- Open-source toolkits for DeepFake detection

Each paper submitted to this series will be reviewed with the first-come-first-serve principle. The first round of decision targets at 4 weeks. Each paper will be published as an open access article immediately after its acceptance. Once all papers in this series are published, they will be assembled into an online book with an editorial written by the guest editorial team. If a paper cannot be accepted within the publication window, it will be changed to a regular paper. If you are interested in paper submission, please refer to: <a href="https://www.nowpublishers.com/Journal/AuthorInstructions/SIP">https://www.nowpublishers.com/Journal/AuthorInstructions/SIP</a>

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