

## Information-Theoretic Methods for Trustworthy and Reliable Machine Learning

### Call for papers

*IEEE Journal on Selected Areas in Information Theory (JSAIT)*

Editor-in-Chief: Tara Javidi (University of California, San Diego)

Modern computation environments are struggling to store, communicate and process data in unprecedented volumes. These data, which come in new and evolving structures and formats, necessitate compression, lossless and lossy. Recent years have witnessed the emergence of new techniques, approaches, and modes for data compression. This special issue will focus on cutting edge research in this space.

### Prospective authors are invited to submit original manuscripts on topics including but not limited to:

- Distributed and multi terminal compression
- Compression under new and emerging perceptual metrics
- Rate - Distortion - Complexity - Delay tradeoffs
- Joint source channel coding/joint compression and error correction
- Compression meets encryption/privacy/security
- Random access and computation in the compressed domain
- Compression with, for and of neural networks
- Compression of graphs and non-traditional data structures
- Specialized compression for: genomics, multimedia, VR, point clouds, sensors, astronomy, etc.
- Quantum compression
- Compression, learning, prediction and information processing
- Theory of Compression
- Model compression
- Universality in data compression

### Lead Guest Editors:

Meir Feder (Tel Aviv University): [meir@tauex.tau.ac.il](mailto:meir@tauex.tau.ac.il)

Tsachy Weissman (Stanford University): [tsachy@stanford.edu](mailto:tsachy@stanford.edu)

### Guest Editors:

Jun Chen (McMaster University): [junchen@mail.ece.mcmaster.ca](mailto:junchen@mail.ece.mcmaster.ca)

Ashish Khisti (University of Toronto): [akhisti@ece.utoronto.ca](mailto:akhisti@ece.utoronto.ca)

Victoria Kostina (Caltech): [vkostina@caltech.edu](mailto:vkostina@caltech.edu)

Idoia Ochoa (UIUC and University of Navarra – TECNUN): [iochoal@unav.es](mailto:iochoal@unav.es)

George Toderici (Google): [george.toderici@gmail.com](mailto:george.toderici@gmail.com)

**Overseeing Senior Editor:** Alon Orlitsky (UC San Diego): [aorlitsky@eng.ucsd.edu](mailto:aorlitsky@eng.ucsd.edu)

### Submission Guidelines

Prospective authors must follow the *IEEE Journal on Selected Areas in Information Theory* guidelines regarding the manuscript and its format. For details and templates, please refer to the *IEEE Journal on Selected Areas in Information Theory* Author Information webpage. All papers should be submitted through Scholar One according to the following schedule:

### Key Dates:

**Manuscript Due:** April 1, 2022

**Acceptance Notification:** July 15, 2022

**Final to Publisher:** September 1, 2022

**Expected Publication:** October 2022

**Manuscript Submission Website:** <https://mc.manuscriptcentral.com/jsait-ieee>