

## Coded Computing

### Call for papers

#### IEEE Journal on Selected Areas in Information Theory Special Issue on Coded Computing

The intersection of information theory and computing has been a fertile ground for novel, relevant intellectual problems. Recently, coding-theoretic techniques have been designed to improve performance metrics in distributed computing systems. This has generated a significant amount of research that has produced novel fundamental limits, code designs, and practical implementations. The set of ideas leveraged by this new line of research is collectively referred to as *coded computing*. This special issue will focus on coded computing, including aspects such as tradeoffs between reliability, latency, privacy, and security. Specific topics of interest include:

#### Topics:

Coded distributed computing  
Coded edge computing  
Secure and private coded computing  
Hierarchical coded computing  
Coded elastic computing  
Compression for distributed computing  
Coding for verifiable computing  
Applications (e.g., machine learning, blockchain systems, etc)

#### Important dates:

Manuscript Due: February 15, 2021      Acceptance Notification: July 15, 2021  
Final to Publisher: August 5, 2021      Expected Publication: September 2021

#### Submission Guidelines:

Submitted papers should be of sufficient length and detail for review by experts in the field. Prospective authors must follow the *IEEE Journal on Selected Areas in Information Theory* manuscript submission guidelines in JSAIT Author Information webpage. All papers should be submitted through <https://mc.manuscriptcentral.com/jsait-ieee>

#### Senior editors:

Alex Dimakis, UT      Austin Giuseppe Caire, TU Berlin

#### Guest Editors:

Pulkit Grover (CMU; lead)      Viveck Cadambe (Penn State)      Sennur Ulukus (UMD)  
Stark Draper (UToronto)      Salman Avestimehr (USC)      Osvaldo Simeone (King's College London)