



# 2026 International Conference on Computational Theory and Machine Learning

<https://www.ctml.org/>

Rio de Janeiro, Brazil

November 27-29, 2026

The International Conference on Computational Theory and Machine Learning (CTML 2026) will be held in Rio de Janeiro, Brazil, during November 27 – 29, 2026.

CTML 2026 welcomes researchers, scholars, and practitioners to submit original papers and share the latest research advances in computational theory, machine learning, artificial intelligence, and related fields.

## KEYNOTE SPEAKERS



**Prof. Vishal Monga**

The Pennsylvania State University, USA  
IEEE Fellow, AAIA Fellow



**Prof. Liang Zhao**

University of São Paulo, Brazil  
the Stanford/Elsevier Top 2% Scientists List 2024



**Prof. Mauricio Ayala Rincón**

Brasilia University, Brazil

## CALL FOR PAPERS

### TRACK 1: Foundational Computational Theories in Machine Learning

Bayesian Learning, Variational Inference, and Optimization of Monte Carlo Methods  
Optimization and Applications of VC Dimension and Rademacher Complexity Theory  
Statistical Theoretical Foundations for Few-Shot, Zero-Shot, and Meta-Learning  
Game Theory and Equilibrium Computation in Multi-Agent Learning  
Stochastic Games, Bandit Algorithms, and Sequential Decision Theory

### TRACK 2: Advanced Machine Learning Models and Computational Architectures

Theoretical Analysis of Architectures: Transformers, CNNs, GNNs, etc.  
Neural Architecture Search and Computational Theory of Dynamic Networks  
Decentralized Machine Learning and Edge Distributed Computing  
Edge Inference Optimization, Low-Power Computation, and Latency Control  
Tiny Neural Networks and Embedded Machine Learning Computation

### TRACK 3: Trustworthy, Secure, and Explainable Machine Learning Computation

Differential Privacy Theory, Noise Mechanisms, and Utility Trade-Offs  
Federated Privacy Computing, Data Masking, and Anonymization Theory  
Algorithmic Fairness Metrics, Bias Mitigation, and Group Equilibrium  
Fairness-Constrained Optimization and Robust Decision System Design  
Malicious AI Detection, Backdoor Attacks, and Defensive Computation

### TRACK 4: Cross-Domain Computation and Interdisciplinary Innovations in Machine Learning

Scientific Data Fitting, Numerical Simulation, and Inverse Problem Computation  
Robot Learning, Adaptive Control, and Real-Time Decision Optimization  
Time Series Reasoning, Streaming Data Mining, and Dynamic Pattern Recognition  
Anomaly Pattern Mining, Incremental Learning, and Lifelong Learning Computation  
Knowledge Graphs, Logical Reasoning, and Integration with Machine Learning  
Chaos Theory, Complex Systems, and Coupling with Machine Learning

### TRACK 5: Machine Learning Systems and Engineering Computation

ML Pipeline Scheduling, Resource Allocation, and Load Balancing Optimization  
Model Deployment, Serving, and Dynamic Scaling Computational Theory  
Data Quality, Noise Cleaning, and Trade-Offs in Computational Accuracy  
Distributed Storage, Indexing, and Computational Coordination for Massive Data  
Hardware Adaptation and Operator Optimization for GPU/TPU/NPU/ASIC  
Chip-Level Co-Optimization, Low-Latency Inference, and Hardware Deployment

## CONFERENCE AWARDS



Best Paper Award



Excellent Oral Presentation Award



Excellent Poster Presentation Award

## SUBMISSION

1) Full Paper: The manuscript in double-column format should have at least 4 full pages and up to 10 pages. If it exceeds 5 pages, the extra page(s) will be charged. Manuscripts must be written in English and follow the instructions at Manuscript Formatting and Templates.

2) To ensure the high quality of the accepted papers, all submissions will be peer-reviewed. Authors who submit manuscripts to the conference proceedings confirm that the content of the manuscript is original.

3) In addition, authorship of a submission also implies that the manuscript has not been previously published in any language, in whole or in part, and is not currently submitted for publication elsewhere.

4) Abstract submissions are also acceptable from authors who only wish to present their work and do not intend to publish it.

5) Submission System

<https://www.zmeeting.org/submission/ctml2026>

## PUBLICATION

### Conference Proceedings

Submissions will be reviewed by the conference technical committees, and accepted papers will be published in Conference Proceedings and submitted to **EI Compendex**, **Scopus**, etc. for indexing.

## IMPORTANT DATES

Submission Deadline: June 30, 2026

Notification Date: July 30, 2026

Registration Deadline: August 15, 2026

Camera Ready: August 15, 2026

## CONTACT

Conference Secretary: Mary Zhan

E-mail: [ctmlconf@163.com](mailto:ctmlconf@163.com)

Sponsor

