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: September 20, 2026
- Notification Date: October 20, 2026
- Registration Deadline: November 5, 2026
- Camera Ready: November 5, 2026

CONTACT

Conference Secretary: Murphy Zeng
E-mail: ctmlconf@163.com

Sponsor