The Second Workshop on Federated Learning for Computer Vision (FedVision)
in Conjunction with CVPR 2023
https://fedvision.github.io/fedvision-workshop/

Federated Learning (FL) has become an important privacy-preserving paradigm in various machine learning tasks. However, the potential of FL in computer vision applications, such as face recognition, person re-identification, and action recognition, is far from being fully exploited. Moreover, FL has rarely been demonstrated effectively in advanced computer vision tasks such as object detection and image segmentation, compared to the traditional centralized training paradigm. This workshop aims at bringing together researchers and practitioners with common interests in FL for computer vision and studying the different synergistic relations in this interdisciplinary area. The day-long event will facilitate interaction among students, scholars, and industry professionals from around the world to discuss future research challenges and opportunities.

Keynote speakers
- **Dr. Anastasios Kyrillidis,** Rice University, USA
- **Dr. Nicholas Lane,** University of Cambridge & Laboratory Director Samsung AI, Cambridge, UK
- **Dr. Yang Liu,** Institute for AI Industry Research, Tsinghua University, Beijing, China
- **Dr. Gauri Joshi**, Carnegie Mellon University, USA
- **Dr. Mehdi Bennis,** University of Oulu, FINLAND
- **Dr. Michael Rabbat,** Meta AI, Montreal, Canada
- **Dr. Bo Li,** University of Illinois at Urbana-Champaign, USA

Call for paper
Main research topics of relevance to this workshop include, but are not limited to:
- Novel FL models for computer vision tasks, e.g., scene understanding, face recognition, object detection, person re-identification, image segmentation, human action recognition, medical image processing, etc.
- Privacy-preserving machine learning for computer vision tasks
- Personalized FL models for computer vision applications
- Novel computer vision applications of FL and privacy-preserving machine learning
- FL frameworks and tools designed for computer vision applications and benchmarking
- Novel vision datasets for FL
- Optimization algorithms for FL, particularly algorithms tolerant of data heterogeneity and resource heterogeneity
- Approaches that scale FL to larger models, including model pruning and gradient compression techniques
- Label efficient learning in FL, e.g., self-supervised learning, semi-supervised learning, active learning, etc.
- Neural architecture search (NAS) for FL
- Life-long learning in FL
- Attacks on FL including model poisoning, data poisoning, and corresponding defenses
- Fairness in FL
- Federated domain adaptation
- Privacy leakage and defense in the FL environments
- Privacy-preserving Generative models for CV
- FL based CV pipeline for scene understanding and visual analytics

Submission Deadline: March 09, 2023 (11:59 PM, PST)
Notification: March 27, 2023 (11:59 PM, PST)
Camera-Ready: April 5, 2023 (11:59 PM, PST)
Accepted papers will be published in conjunction with CVPR 2023 proceedings. Paper submissions will adhere to the CVPR 2023 paper submission style, format, and length restrictions.
The CVPR 2023 author kit is available: https://media.icml.cc/Conferences/CVPR2023/cvpr2023-author_kit-v1_1-1.zip

Paper submission website: https://cmt3.research.microsoft.com/FedVision2023
For any questions, please contact Dr. Chen Chen (chen.chen@crcv.ucf.edu)