

MegaData: Federated Learning 2024 Schedule

Date	Time/session	Topic
Monday, July 29	MS*	Welcome meetings to MegaData: Federated Learning – Machine Learning Recap
	AS**	– ML Lifecycle – Prepare Dataset and apply traditional ML & DL – Compare to deep learning.
Tuesday, July 30	MS	– Data Privacy and Data Protection Regulation (e.g., GDPR) – Introduction to Federated Machine learning (Why FL).
	AS	– Simulating a vanilla FL – Apply FedAVG algorithm
Wednesday, July 31	MS	– Guest Talk by Salman Toor (Scaleout, Sweden) – Introduction to FL with FEDn framework
	AS	– FEDn practice session – Frameworks installation, configuration, and setup of FEDn.
Thursday, 1 August	MS	– Guest Talk by Daniel Beutel (UK) – Introduction to FL with FLOWER framework
	AS	– Guest Talk by Pan Heng (FLOWER, UK) – FLOWER practice session – Frameworks installation, configuration, and setup of FLOWER.
Friday, 2 August	MS	- Guest Talk by Javier: FLLM with FLOWER - Guest Talk by Afsana Khan (Netherlands): Vertical Federated Learning
	AS	– Project announcement – & Team forming
Monday, 5 August	MS	– Guest session: Samaneh Mohammadi – Balancing privacy and performance in FL – Student presentation 1
	AS	– Guest session: Samaneh Mohammadi (Sweden) – Encryption in Federated Learning – Guest session: Hiroki Kaminaga – Multi-party computations for FL security
Tuesday, 6 August	MS	– Guest session: Jiang, Xiaowen (Germany) – Federated Learning Optimization – Guest session: Mehreen Tahir (Ireland) – Federated Learning Client Selection

	AS	<ul style="list-style-type: none"> – Guest session on HFL by Shaleeza Sohail (Australia) – Hiralical Federated Learning – Student presentation 2
Wednesday, 7 August	MS	<ul style="list-style-type: none"> – Student presentation 3 – Student presentation 4
	AS	<ul style="list-style-type: none"> – Guest session: FL optimization by Mohamed Elmahallawy in LEO Satellite Networks (USA) – Team working on projects. – Feedback from monitors
Thursday, 8 August	All day	<p style="text-align: center;">Team working on projects. Preparing posters and demos</p>
Friday, 9 August	09:00 – 11:00 11:30 – 13:00 14:30 – 16:30	<p style="text-align: center;">Participant's projects and final presentations</p>

MS*: Morning Session

AS: Afternoon Session**