

2020 雲端計算 論文報告 (25%)

1. 因為人數眾多，所以我們 6/4-6/18 的課由 **13:20 開始到 17:30**。上課教室改到**台達館 109**，若是你要改題目和改時間，請盡早（5/14 前）跟我聯絡。
2. 口頭報告基本上以小組為單位，分組表和時間安排如下表。請找到你的小組員，討論一下要如何報告，每人平均口頭報告約 10 分鐘。如果你們小組有 4 個人，那就有 40 分鐘的時間可以報告。
3. 口頭報告請包含以下四個重點
 - 甲、The information about the paper (published in where, when, authors...)
 - 乙、What problem they want to solve?
 - 丙、Proposed methods
 - 丁、Experimental results如果是小組報告的話，第二部分(乙)可以合併。
如果你的論文是 survey 型的論文，請把丙丁兩項改為
 - 丙、How to categorize the methods/problems/applications...
 - 丁、Comparison among different methods
4. 你們還需要在 5/28 前交一份書面報告（每人一份，最多四頁），內容除了口頭報告的四個要點外，還必須包含以下兩點
 - 戊、Weakness and strength of this paper
 - 己、Possible extensions

上台報告日期：6/4

分組	學號	論文題目	附註
1.	108026506	Large Scale Distributed Deep Networks	可以找更新的
	108062514	Distributed Training Strategies for the Structured Perceptron	可以找更新的
	108061558	Demystifying Parallel and Distributed Deep Learning: An In-Depth Concurrency Analysis	
	108062575	End-to-End Optimization of Multi-headed Models	
2	108062515	Scaling Distributed Machine Learning with In-Network Aggregation	
	108033581	Distributed Deep Learning Framework based on Shared Memory for Fast Deep Neural Network	
	107034549	Deep gradient compression: Reducing the communication bandwidth for distributed training	
	108062641	Accurate, Large Minibatch SGD Training ImageNet in 1 Hour	

3	108062585	Recurrent Experience Replay in Distributed Reinforcement Learning	
	108062626	Distributed Prioritized Experience Replay	
	106062109	Asynchronous Methods for Deep Reinforcement Learning	
	108062637	Distributed Deep Reinforcement Learning on the Cloud for Autonomous Driving	
4	108062644	Federated Learning: Challenges, Methods, and Future Directions	
	108065511	Federated Machine Learning: Concept and Applications	
	105060018	Towards Federated Learning at Scale: System Design	
	106060016	Federated Multi-Task Learning	
5	108062570	Generative Models for Effective ML on Private, Decentralized Datasets	
	108062803	Federated Topic Modeling.	
	108061613	Beyond Inferring Class Representatives: User-Level Privacy Leakage From Federated Learning	
6	105061129	Federated Machine Learning for Intelligent IoT via Reconfigurable Intelligent Surface	
	108061519	Communication-Efficient Learning of Deep Networks from Decentralized Data	
	106033211	Communication-Efficient Federated Deep Learning With Layerwise Asynchronous Model Update and Temporally Weighted Aggregation	
	106060015	Towards Ubiquitous AI in 6G with Federated Learning	
	106060024	Federated Learning: Strategies for Improving Communication Efficiency	
7	108062606	Yolo v4	

上台報告日期：6/11

分組	學號	題目	附註
8	107065808	Functional and Contextual Attention-Based LSTM for Service Recommendation	
	108065506	Redundant virtual machine placement for fault-tolerant consolidated server clusters	

	105062223	Cloud security: Emerging threats and current solutions	
	108164501	Efficient k-Nearest Neighbor Classification Over Semantically Secure Hybrid Encrypted Cloud Database	
9	106061209	Serverless computing for container-based architectures	
	108062632	Serverless Computing: One Step Forward, Two Steps Back	
	105062321	Catalyzer: Sub-millisecond Startup for Serverless Computing with Initialization-less Booting	
	106060023	My VM is Lighter (and Safer) than your Container	
10	108164508	Divide et Impera: MemoryRanger Runs Drivers in Isolated Kernel Spaces	
	106061101	Ballooning Graphics Memory Space in Full GPU Virtualization Environments	
	107522026	Parallelizing Live Migration of Virtual Machines	
	108062567	Memory deduplication	
11	105061114	Sharing, Protection, and Compatibility for Reconfigurable Fabric with AmorphOS	
	107062560	AuTO: Scaling Deep Reinforcement Learning for Datacenter-Scale Automatic Traffic Optimization	
	106062101	An efficient deception architecture for cloud-based virtual networks	
12	108062518	SpeedyBox: Low-Latency NFV Service Chains with Cross-NF Runtime Consolidation	
	108064524	Interaction of Edge-Cloud Computing Based on SDN and NFV for Next Generation IoT	
	108062655	Dynamic Routing Method over Hybrid SDN for Flying Ad Hoc Networks	
	107064528	A Survey on Low Latency Towards 5G: RAN, Core Network and Caching Solutions	
13	108164510	Secure and Scalable Data Collection With Time Minimization in the Smart Grid	

14	108062582	Reinforcement learning agents to tactical air traffic flow management	可以找更新的
15	105062140	RIM: Robust Intersection Management for Connected Autonomous Vehicles	
16	105066802	A CNN-Based Visual Sorting System With Cloud-Edge Computing for Flexible Manufacturing Systems	
17	106062301	Comparison of Data Preprocessing Approaches for Applying Deep Learning to Human Activity Recognition in the Context of Industry 4.0	

上台報告日期：6/18

分組	學號	題目	附註
18	105062118	Edge Computing: Vision and Challenges	
	108064551	Edge Computing Perspectives: Architectures, Technologies, and Open Security Issues	
	107062625	Security and Privacy in Fog Computing: Challenges	
	108062586	Resource Allocation With Edge Computing in IoT Networks via Machine Learning	
19	108064532	Mobile Edge Computing: Opportunities, solutions, and challenges	
	108065536	On the Optimality of Task Offloading in Mobile Edge Computing Environments	
	108065702	Mobile Edge Computing with Network Resource Slicing for Internet-of-Things	
	108064531	Fog-based Data Offloading in Urban IoT Scenarios	
	108062597	Consolidate IoT Edge Computing with Lightweight Virtualization	
20	108065526	Remote Debugging for Containerized Applications in Edge Computing Environments	
21	107062655	In-Edge AI: Intelligentizing Mobile Edge Computing, Caching and Communication by Federated Learning	重複，請再找一篇
	108062602		
	108065467	Learning IoT in Edge: Deep Learning for the Internet of Things with Edge Computing	
	108064529	On-Demand Accelerating Deep Neural Network Inference via Edge Computing	

	108134505	Intelligent Edge: Leveraging Deep Imitation Learning for Mobile Edge Computation Offloading	
22	108062702	Distributed Edge Cloud R-CNN for Real Time Object Detection	
	108061527	AutoML for Model Compression and Acceleration on Mobile Devices	
	106062527	Lite Transformer with Long-Short Range Attention	
23	107065710	Blockchain Technology: Principles and Applications	
	105062101	Blockchain for Secure and Efficient Data Sharing in Vehicular Edge Computing and Networks	
24	107061521	Linear Symmetric Quantization of Neural Networks for Low-precision Integer Hardware	
	107061604	Training Low Bit-width Convolutional Neural Network on RRAM	
	107065507	A Reconfigurable Streaming Deep Convolutional Neural Network Accelerator for Internet of Things	
	108061532	RANA: Towards Efficient Neural Acceleration with Refresh-Optimized Embedded DRAM	
	108061535	A Quantized Training Method to Enhance Accuracy of ReRAM-based Neuromorphic Systems	
25	105011240	Real Time Apple Detection System Using Embedded Systems With Hardware Accelerators	