AC215 FALL 2024 SCHEDULE

Week	Date	Session	Lecture	Milestones
1	9/3	1	Introduction	
	9/5	2	LLM tools and agents 1: LangChain, LamaIndex, API calls, RAGS, AI agents	
2	9/10	3	LLM tools and agents 2: LangChain, LamaIndex, API calls, RAGS, AI agents	
	9/12	4	Virtual Enviroments and Virtual Machines	
3	9/17	5	Containers I	
	9/19	6	Containers II	M1
4	9/24	7	Data Pipelines/ Data Management: Extract, Transform, Data Version	
	9/26	8	TF Data, TF Records, PyTorch Dataset, DataLoader, Cloud Storage	HW1
5	10/1	9	Large Data for CV and LLMs (spezialized tools)	
	10/3	10	Advanced training workflows: experiment tracking (W&B), multi GPU, serverless training (Vertex AI), LLM fine tuning	
6	10/8		PROJECT WEEK	
	10/10			M3
7	10/15	11	Model Distillation/Quantization/Compression LORA	
	10/17	12	Model Deployment/Host/API, Hosting LLMs	M4
8	10/22		Midterm	
	10/24	13	Model performance monitoring, data drift, or other post release items (James LangChain)	
9	10/29	14	Testing, Cloud Functions, Cloud Run, Kubeflow, Vertex AI Pipelines	
	10/31	15	CI CT, Github Action, etc (Jenkins).	HW2
10	11/5	16	App design, setup and code organization	
	11/7	17	APIs & Frontend	
11	11/12	18	Frontend - React	
	11/14	19	Deployment: Ansible	M5
12	11/19	20	Scaling: Kubernetes	
	11/21	21	Final: CI/CD releases etc	HW3
13	11/26	21	THANKS GIVING WEEK	
	11/28	22		
14	12/3		PROJECT TIME	
	12/11		DELIVERABLES DEADLINE	M6