AC215 FALL 2024 SCHEDULE

Week	Date	Session	Lecture	Milestones/HW due dates
1	9/3	1	Introduction	
	9/5	2	Virtual Enviroments and Virtual Machines	
2	9/10	3	Containers I	
	9/12	4	Containers II	
3	9/17	5	Data Pipelines/ Data Management: Extract, Transform, Load (ETL) and Data Version	
	9/19	6	TF Data, TF Records, PyTorch Dataset, DataLoader, Cloud Storage	M1 - 09/20
4	9/24	7	LLM tools and agents 1: LangChain, LlamaIndex, API calls, RAG, AI agents	
	9/26	8	LLM tools and agents 2: LangChain, LlamaIndex, API calls, RAG, AI agents	HW1 - 09/27
5	10/1	9	Model Optimization: Distillation, Quantization, Compression [IB]	
	10/3	10	LLM fine tuning and LORA	
6	10/8		PROJECT WEEK	
	10/10			
7	10/15	11	Advanced training workflows: experiment tracking (W&B), multi GPU, serverless training (Vertex AI)	
	10/17	12	Model Deployment: Hosting, APIs, and Serving LLMs	M2 - 10/18
8	10/22	13	Model performance monitoring, data drift, or other post release items	
	10/24	14	Modal Labs Guest Lecture	
9	10/29	15	Testing, Cloud Functions, Cloud Run, Kubeflow, Vertex AI Pipelines	
	10/31		Midterm	M3: MIdterm Presentation 10/31
10	11/5	16	Automating Software Development: CI/CD with GitHub Actions and other tools [IB]	
	11/7	17	App design, setup and code organization (SJ)	HW2 - 11/8
11	11/12	18	APIs & Frontend (SJ) (Frontend - React (SJ) Optional Extra to be Scheduled)	
	11/14	19	Deployment: Ansible	M4 - 11/15
12	11/19	20	Scaling: Kubernetes	
	11/21	21	Final: CI/CD releases etc	
13	11/26		THANKS GIVING WEEK	
	11/28			
14	12/3		PROJECT TIME	HW3 - 12/2
				M5 - 12/11
	12/18		DELIVERABLES DEADLINE	

AC215 FALL 2024 SCHEDULE

Week	Date	Session	Lecture	Instructor	Milestones/HW due dates	
1	9/3	1	Introduction	PP		USA
	9/5	2	Virtual Enviroments and Virtual Machines	PP		Greece
2	9/10	3	Containers I	PP		Sweden
	9/12	4	Containers II	PP		Chile
3	9/17	5	Data Pipelines/ Data Management: Extract, Transform, Load (ETL) and Data Version	PP		Australia
	9/19	6	TF Data, TF Records, PyTorch Dataset, DataLoader, Cloud Storage	PP	M1 - 09/20	Belgium
4	9/24	7	LLM tools and agents 1: LangChain, LlamaIndex, API calls, RAG, AI agents	PP		Italy
	9/26	8	LLM tools and agents 2: LangChain, LlamaIndex, API calls, RAG, AI agents	PP	HW1 - 09/27	Kenya
5	10/1	9	Model Optimization: Distillation, Quantization, Compression [IB]	IB		Mexico
	10/3	10	LLM fine tuning and LORA	PP		India
6	10/8		PROJECT WEEK			
	###					
7	###	11	Modal Labs Guest Lecture Zoom	GL		Spain
	###	12	Advanced training workflows: experiment tracking (W&B), multi GPU, serverless training (Vertex AI)	IB	M2 - 10/18	Egypt
8	###	13	Model Deployment: Hosting, APIs, and Serving LLMs	CG		Turkey
	###	14	Model performance monitoring, data drift, or other post release items	PP		Switzerland
9	###	15	Testing, Cloud Functions, Cloud Run, Kubeflow, Vertex AI Pipelines	PP		Cyprus
	###		Midterm		M3: Midterm Presentation 10/31	
10	11/5	16	Automating Software Development: CI/CD with GitHub Actions and other tools [IB]	IB		Romania
	11/7	17	App design, setup and code organization (SJ)	SJ	HW2 - 11/8	Peru
11	###	18	APIs & Frontend (SJ) (Frontend - React (SJ) Optional Extra to be Scheduled)	SJ		Norway
	###	19	Deployment: Ansible	PP	M4 - 11/15	Srilanka
12	###	20	Scaling: Kubernetes	PP		Poland
	###	21	Final: CI/CD releases etc	PP		Netherlands
13	###		THANKS GIVING WEEK			
	###					
14	12/3		PROJECT TIME	PP	HW3 - 12/2	
	###		DELIVERABLES DEADLINE		M5 - 12/11	

If you cannot attend lectures please put your name here	Missing Lecture
~~09/03~~	
~~09/05~~	
09/10	Patrick and Octavian will attend remote
09/12	Yasmine
09/17	Rashmi
09/19	Luis
09/24	
09/26	
10/01	
10/03	
10/15	
10/17	
10/22	
10/24	Zoom Guest Lecture
10/29	
10/31	
11/05	
11/07	
11/12	
11/14	
11/19	
11/21	

On Campus TFs
Li Yao
Luis
Octavian Balatel
Connor
Patrick

Online
Rashmi, Shivas, Yasmine

Ed Checks (EST)						
	Mon	Tues	Weds	Thurs	Fri	Sat
8						
9						
10						
11						
12 PM						
1 PM						
2 PM						
3 PM						
4 PM						
5 PM						
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7 PM						
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9 PM						
10 PM						
11 PM						

Date	
~~9/5~~	
~~9/7~~	
~~9/12~~	
~~9/14~~	
~~9/19~~	
9/21	Dask, Cloud Storage
9/26	TF Data and TF Records
9/28	Model Management: (multi gpu, data parallelization)
~~10/3~~	
~~10/5~~	
10/10	Distillation/Quantization/Compression, TF lite
10/12	Model performance monitoring, data drift, or other post rel
10/17	ML Workflow Mangement: kubeflow, cloud functions
10/19	ML Workflow Mangement: Hands on Mega Pipeline App
10/24	
10/26	
10/31	App design, setup and code organization

TF (max 2 TFs per lecture)

Sign up here	Sign up here
Jarrod Parks	Connor
Boxiang	Sign up here

Jarrod Parks	Sign up here
Andrew	Sign up here
Cole	Sign up here
Sign up here	Sign up here

Sign up here	Sign up here

Rashmi	rjain29@gmail.com	
Shivas	shivasj@gmail.com	https://github.co
Luis Henrique Simplico	lsimplicioribeiro@g.harvard.edu	
Li Yao	li_yao@fas.harvard.edu	
Yasmine Morrison	yasmine.a.morrison@gmail.com	https://github.co
Octavian		
Patrick		
Javier Machin	jmachinmatos@fas.harvard.edu	
Chris		
Ignacio		
Pavlos		

	AWS Account Id
1.5	7.44941E+11
2	7.83967E+11
1	9.54976E+11
1	5.5905E+11
0.5	
1	
0.5	
0.5	
8	

Grade Distribution	
HW1	4
HW2	4
HW3	4
M1	4
M2	10
M3	25
M4	14
M5	35