

DEEP LEARNING FOR AI AND COMPUTER VISION

JULY 19–23, 2021 | Instructors: Antonio Torralba, Phillip Isola

	MONDAY, JANUARY 25	TUESDAY, JANUARY 26	WEDNESDAY, JANUARY 27	THURSDAY, JANUARY 28	FRIDAY, JANUARY 29
9:00 am	L1 Introduction to computer vision (Torralba)	L5 Neural networks (Isola)	L9 Multiview geometry (Torralba)	L13 People understanding (Torralba)	L17 Vision for embodied agents (Isola)
10:00 am	L2 Cameras and image formation (Torralba)	L6 Filters and CNNs (Torralba)	L10 3D deep learning (Torralba)	L14 Vision and language (Torralba)	L18 Modern computer vision in industry: self-driving, medical imaging, and social networks (Torralba)
11:00 am	BREAK				
11:15 am	L3 Introduction to machine learning (Isola)	L7 Stochastic gradient descent (Torralba)	L11 Scene understanding part 1 (Isola)	L15 Image synthesis and generative models (Isola)	L19 Datasets, bias, and adaptation, robustness and security (Torralba)
12:15 pm	LUNCH				
1:30 pm	L4 The problem of generalization (Isola)	L8 Temporal processing and RNNs (Isola)	L12 Scene understanding part 1 (Isola)	L16 AR/VR and graphics applications (Isola)	L20 Deepfakes and their antidotes (Isola)
2:45 pm	BREAK				
3:00 pm	Lab on Pytorch	Lab on using modern computing infrastructure	Lab on scene understanding	Lab on generative adversarial networks	Lab on your own work (bring your project and we will help you to get started) Closing remarks
5:00 pm	ADJOURN				