Day One:

9:00am: 1 - Introduction to computer vision (Torralba)

10:00am: 2- Cameras and image formation (Torralba)

11:00am: Coffee break

11:15am: 3- Introduction to machine learning (Isola)

12:15pm: Lunch (provided)

1:30pm: 4- The problem of generalization (Isola)

2:45pm: Coffee break

3:00pm: Lab on Pytorch

5:00pm : Adjourn

Day Two:

9:00am: 5- Neural networks (Isola)

10:00am: 6- Filters and CNNs (Torralba)

11:00am: Coffee break

11:15am: 7- Stochastic gradient descent (Torralba)

12:15pm: Lunch break (on your own)

1:30pm: 8- Temporal processing and RNNs (Isola)

2:45pm: Coffee break

3:00pm: Lab on using modern computing infrastructure

5:00pm: Adjourn

Day Three:

9:00am: 9- Multiview geometry (Torralba)

10:00am: 10- 3D deep learning (Torralba)

11:00am: Coffee break

11:15am: 11- Scene understanding part 1 (Isola)

12:15pm: Lunch break (on your own)

1:30pm: 12- Scene understanding part 1 (Isola)

2:45pm: Coffee break

3:00pm: Lab on scene understanding

5:00pm: Adjourn

Day Four:

9:00am: 13- People understanding (Torralba)

10:00am: 14- Vision and language (Torralba)

11:00am: Coffee break

11:15am 15- Image synthesis and generative models (Isola)

12:15pm: Lunch break (on your own)

1:30pm: 16- AR/VR and graphics applications (Isola)

2:45pm: Coffee break

3:00pm: Lab on generative adversarial networks

5:00pm: Adjourn

Day Five:

9:00am: 17- Vision for embodied agents (Isola)

10:00am: 18- Modern computer vision in industry: self-driving, medical imaging, and social networks (Torralba)

11:00am: Coffee break

11:15am: 19- Datasets, bias, and adaptation, robustness and security (Torralba)

12:15pm: Lunch break (on your own)

1:30pm: 20- Deepfakes and their antidotes (Isola)

2:45pm: Coffee break

3:00pm: Lab on your own work (bring your project and we will help you to get started)

4:55pm: closing remarks

5:00pm: Adjourn