

# Deep Learning

Mayank Goel

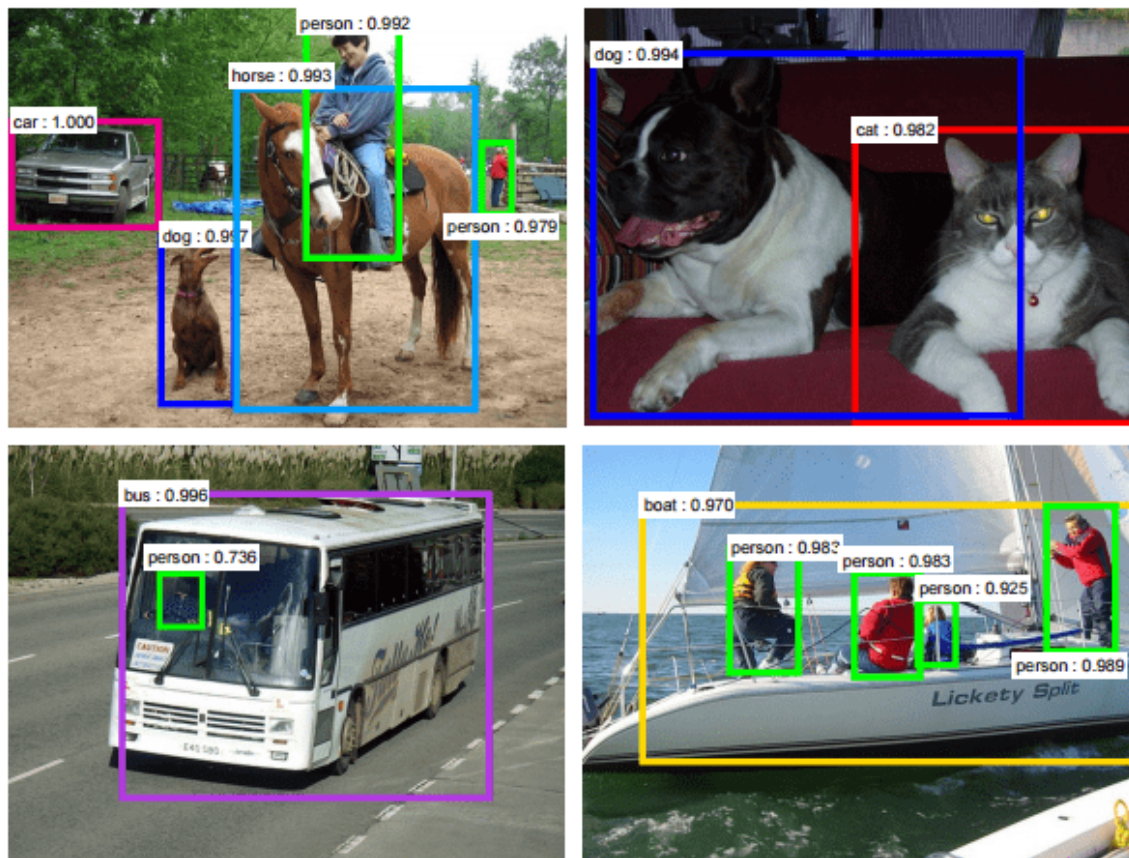
*Number of graphics in this talk borrowed from: 3Blue1Brown - has wonderful tutorials related to Neural Networks and machine learning on their YouTube channel*

# The Age of Deep Learning

Where have you seen it?

# The Age of Deep Learning

- Image Classification / Object Detection



# The Age of Deep Learning

- Image Captioning



"man in black shirt is playing guitar."



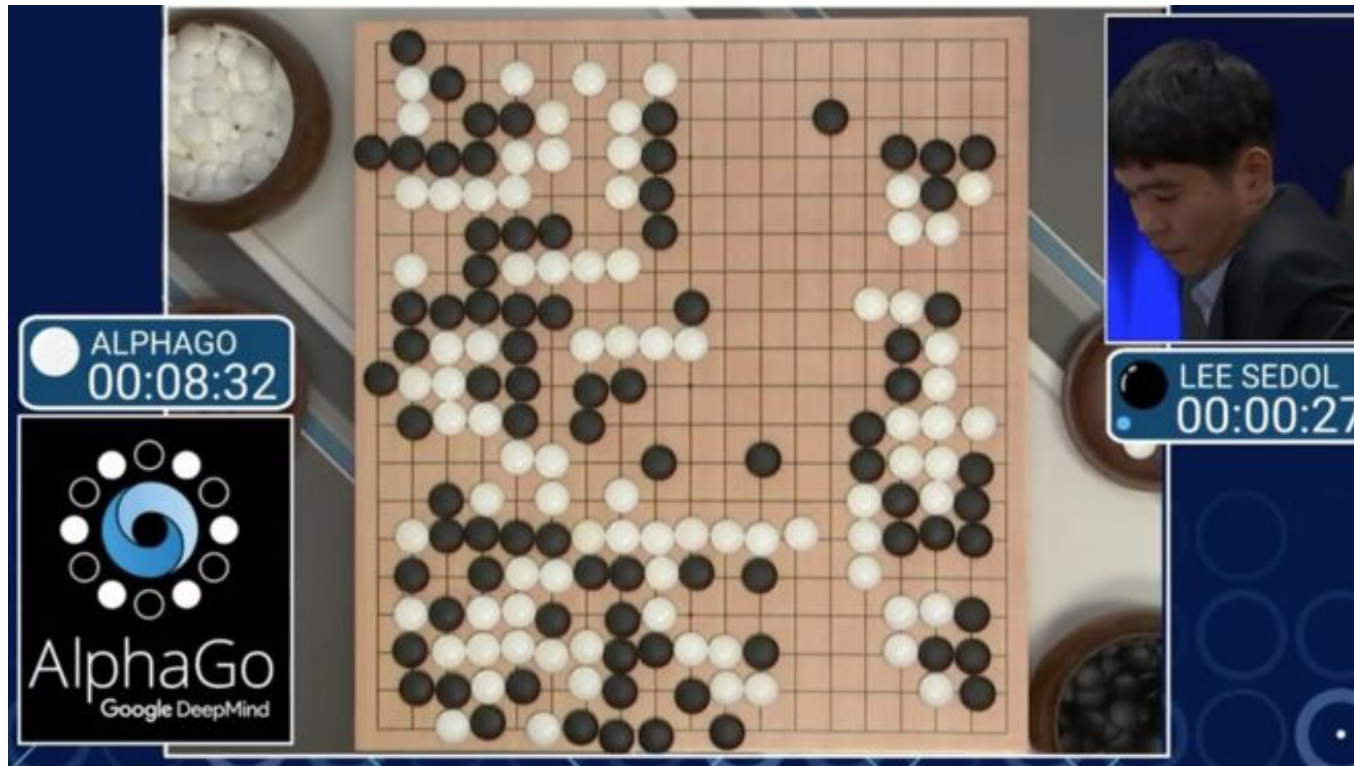
"construction worker in orange safety vest is working on road."



"two young girls are playing with lego toy."

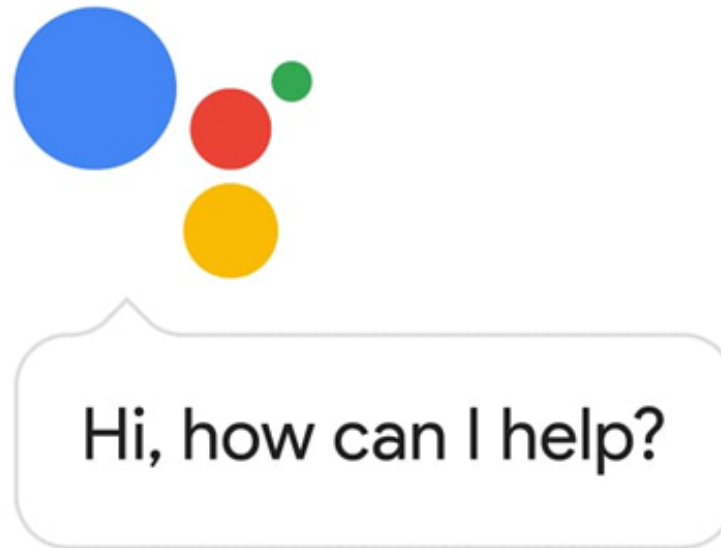
# The Age of Deep Learning

- Games



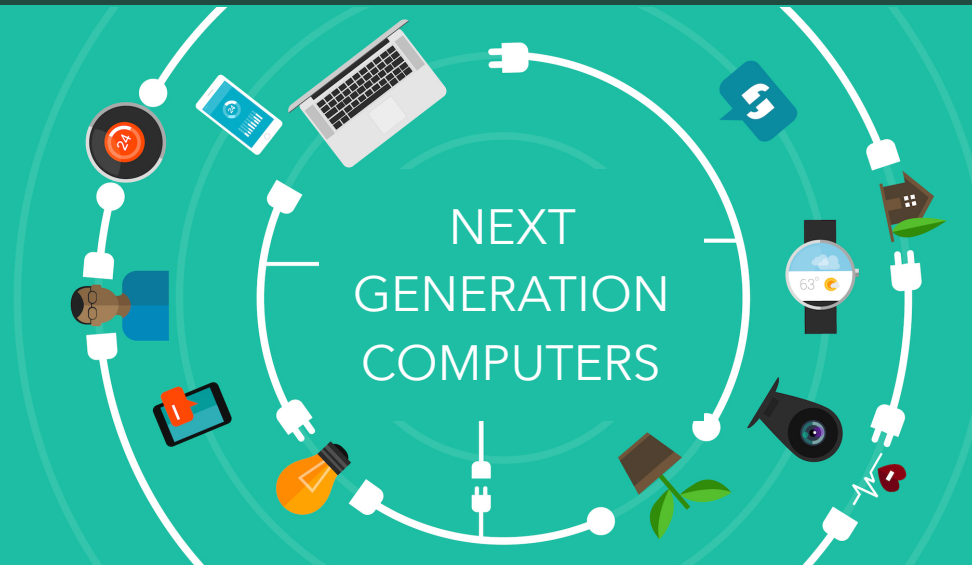
# The Age of Deep Learning

- Voice-based Virtual Assistants





# DESIGN & BUILD



## COURSE

17-422/722 & 05-499/899

Building User-Focussed  
Sensing Systems

Tues/Thurs 3:00-4:20PM

INSTRUCTORS **Mayank Goel, Yuvraj Agarwal**

WEBSITE [spring20.mayankgoel.courses](http://spring20.mayankgoel.courses)

## LEARN

Sensing  
Signal Processing  
Mobile Computing  
Computer Vision

3D Printing and Milling  
Embedded Computing  
Human-Computer Interaction  
Distributed Systems