Google Brain Team blog URL – <https://ai.googleblog.com/2018/01/the-google-brain-team-looking-back-on.html>

Google Brain Team Research topic URL - <https://ai.google/research/pubs/?team=brain&collection=ICLR>

Jeff Dean Lecture **for YC AI** youtube URL – youtu.be/HcStIHGpjN8 -- g.co/brain

Intro:

Google brain – to make machine intelligence, to use the research to help and improve people life such as health, robotic.

Open-source system – **tensorflow**

Good handle on system to store and manipulate data – understanding

**Deep Neural network**-: result get better with

More data

Bigger model

More computation

Better algorithms & insights(which model are easily to train)

**Speech recognition:** – acoustic input -> deep recurrent neural network -> how clod is it outside. (recued word error by 30%)

The inception Architecture(GoogLeNet,2014) going deeper with convolutions -> **image recognition:.** Google search – photos

<https://www.cs.unc.edu/~wliu/papers/GoogLeNet.pdf>

**Medical imaging** – using similar model for detecting diabetic retinopathy in retinal images.

Image captioning -> translate the picture into a sentence

Neural working:

**Networks with functions and programs** -> given a context and a questions. What is the answer. Using Dep neural network

**Joint training of many tasks** -> different input and different output using deep neural networks

**Combining vision with robotics** – deep learning for robots: learning from large-scale interaction. Picking up items constantly and collect data.

**Concrete Problems in AI safety-** research paper about the rising attention to the potential impacts of AI technologies on society.