



Sanjay Reddy S

Computer Vision
NLP
Data Analytics

MS UMass CS, 2017- 2019

Seeking: **Internship, Summer 2018**

Internship, Microsoft & JPMC, Docker Containers & ML Hackathon (2nd)

Research Internship, TIFR, Twitter bot which tweets bus routes

BS, CS, BITS Pilani, India, Data Mining, Artificial Intelligence, Pattern Recog.

Image Description System

*“Our smartest computers are still **blind!**” — Fei-Fei-Li, 2015*

Problem

- 1) Child of four can recognize over 1000 objects.
- 2) We want descriptive sentences also!



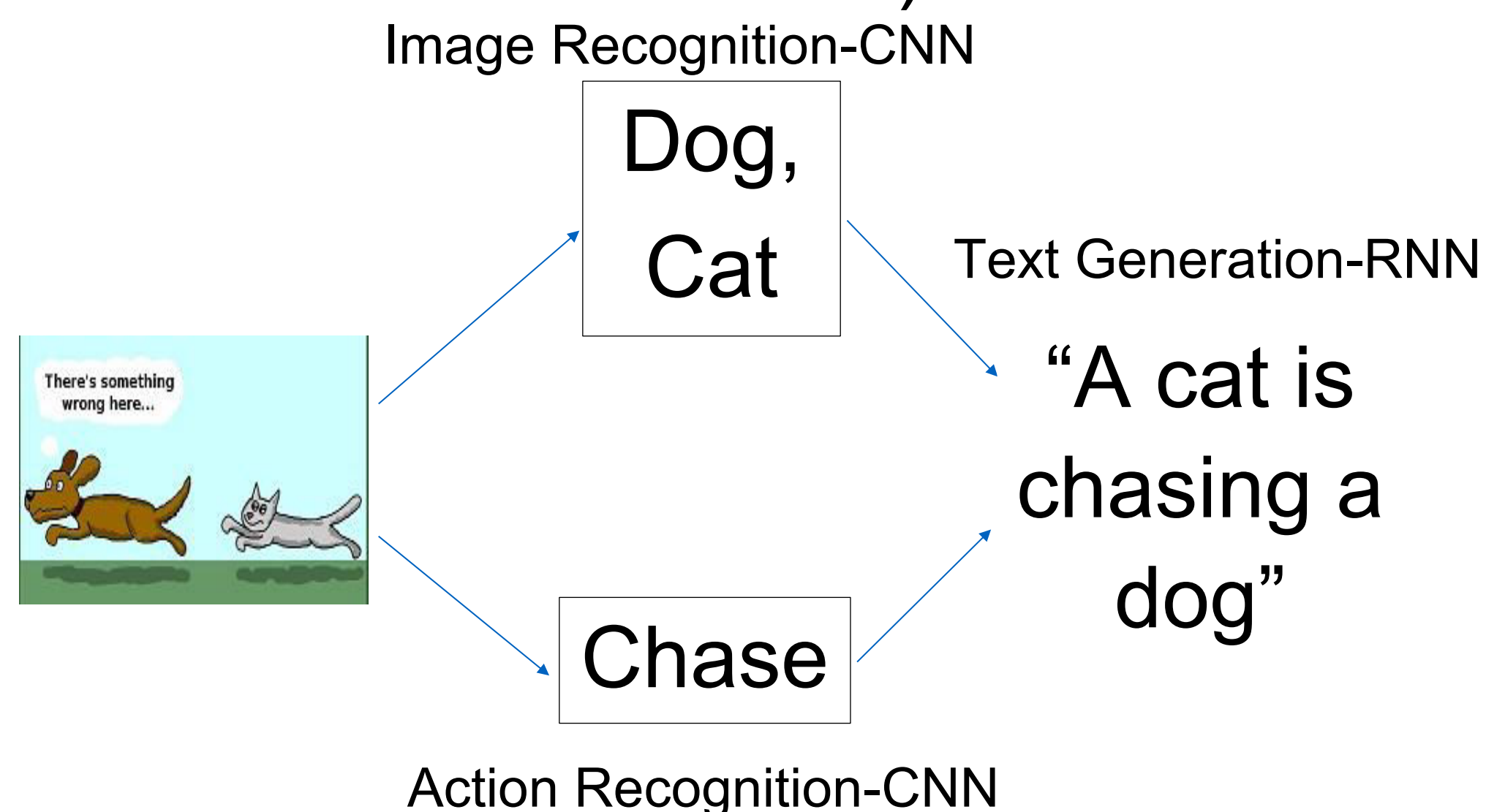
A Cat is
chasing a
dog

Current Buzz...

- 1) Image Recognition and Text generation
- 2) **Deep** Neural Networks

Solution

- 1) Find objects in the image (VGG-16)
- 2) Recognize the actions (Snapshots)
- 3) Construct a sentence (Machine Translator tweaked)



Related work

- 1) [Google Tensorflow](#)
- 2) [Andrew Karpathy RNN](#)
- 3) [Sequence to Sequence Learning at NIPS](#)

Results

- 1) 90% on Image Features
- 2) 73% on Actions
- 3) 62% on Sentences



Limitations ☹️

- 1) Huge time to train and needs lot of data and computation
- 2) Very dependent on training data's domain

Future

- 1) Actions from Videos
- 2) Expand the domain
- 3) Black-box vs pipelined approach

Seeking...

Internship in the areas
Of ML and Data Analytics
For **Summer 2018**.