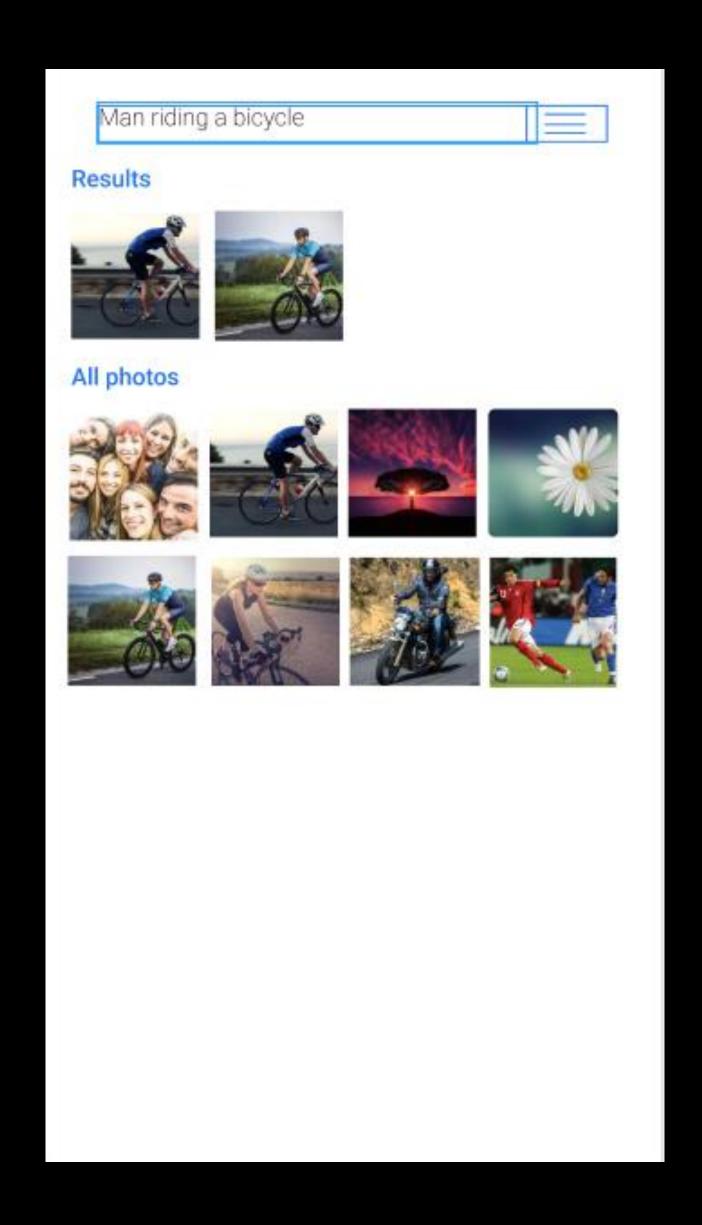
# Text based image retrieval system

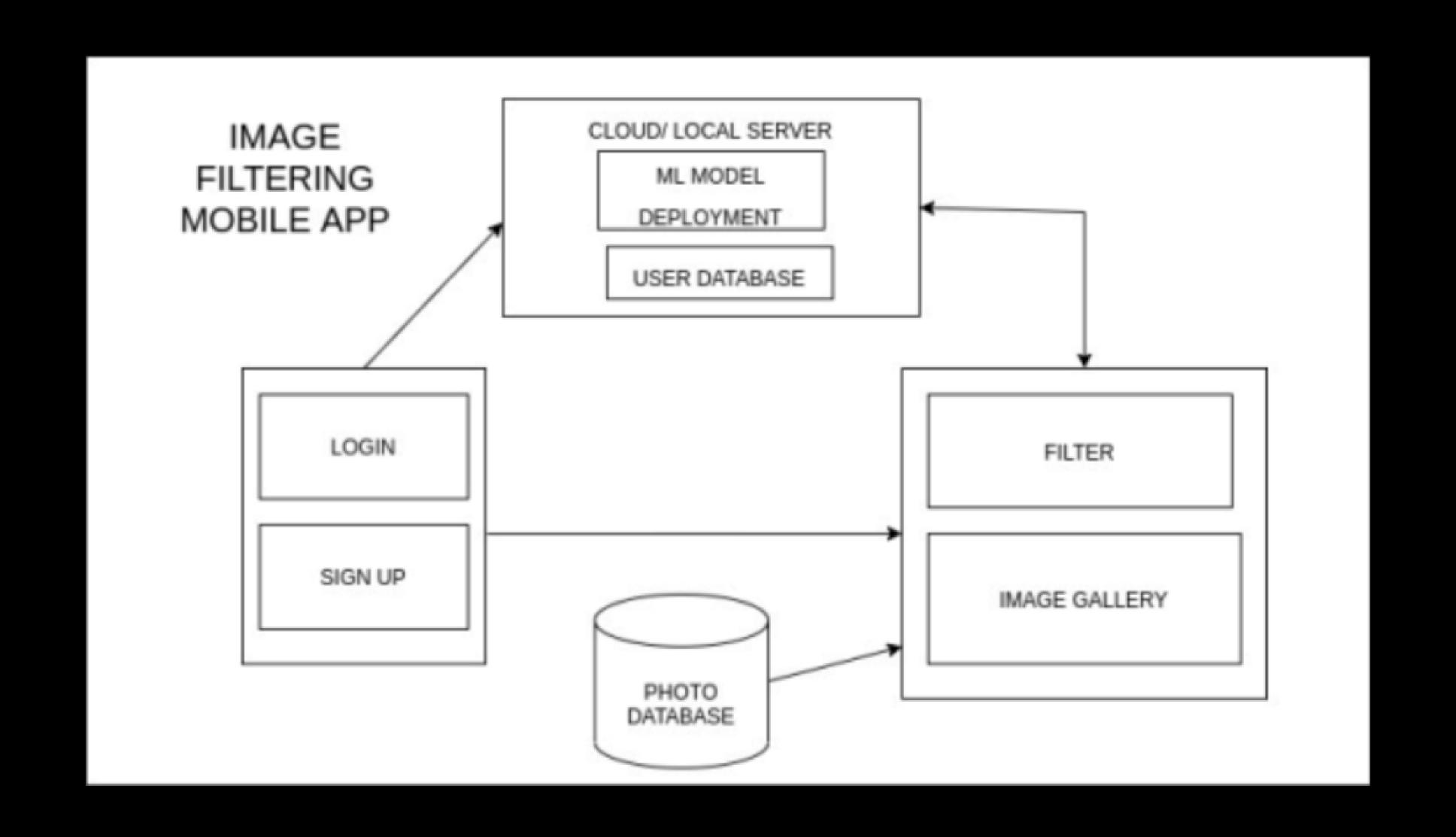
1911001- Aakash Saroop 1911003- Bhairav Narkhede 1911004- Nidhi Bhanushali

### General

- Solves the problem of finding the relevant photo from a large amount of photos
- Captions corresponding to each image generated
- Retrieves images with captions closely match the query text.



### Architecture



### Literature survey

Research paper title	Approach	Gaps	
ViLBERT	Learns task-agnostic joint representations of image content and natural language	Needs data as MCQs Training data small	
Composing Text and Image for Image Retrieval	Image retrieval with query as image and text	Works well only for images in controlled environment	

### How are captions generated?

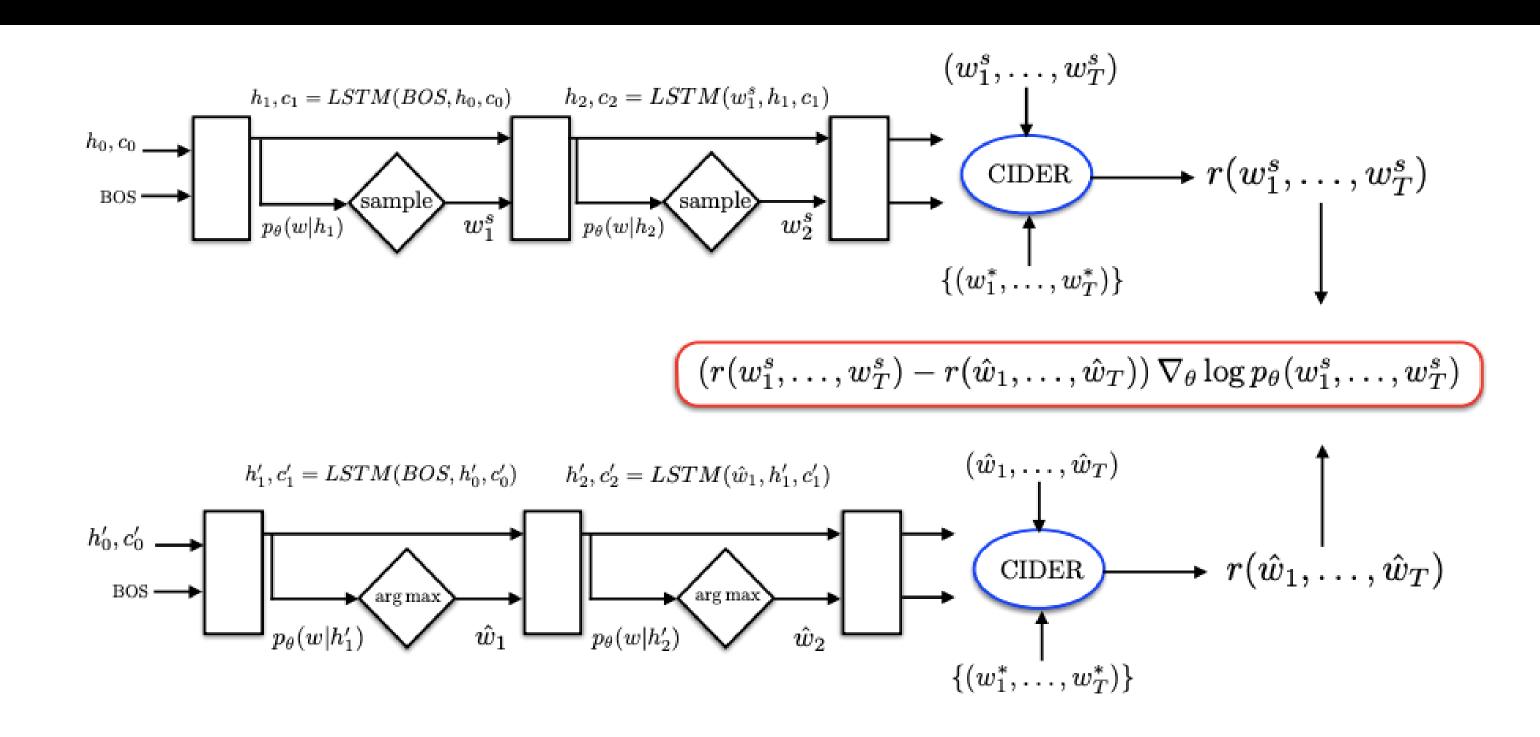


Figure 1: Self-critical sequence training (SCST). The weight put on words of a sampled sentence from the model is determined by the difference between the reward for the sampled sentence and the reward obtained by the estimated sentence under the test-time inference procedure (greedy inference depicted). This harmonizes learning with the inference procedure, and lowers the variance of the gradients, improving the training procedure.

# Screenshots of image captioning



a group of people sitting around a table eating cake
a group of people gathered around a table with food
a group of people sitting at a table with plates of food
a group of people sitting at a table with a plate of food
a group of people gathered around a table with food and drink



a woman riding a bike down a dirt road a woman is riding a bike down a path a woman riding a bike down a path a woman is riding a bike down a dirt road a woman riding a bike on a dirt road



a group of men playing a game of soccer a group of young men playing a game of soccer a group of men playing soccer on a field a group of men playing a soccer game a group of men are playing soccer on a field



two zebras and a giraffe walking down a road two zebras and a giraffe walk down a road two zebras and a giraffe crossing a road two zebras and a giraffe are walking down the road two zebras and a giraffe are walking down a road

## Screenshots of the app

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Enter Username

### Password

Enter Password

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Submit

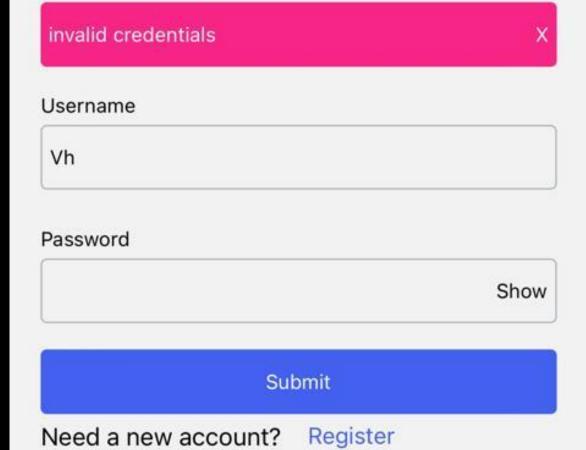
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Please add a username

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Enter First name

Please add a first name

Last Name

Enter Last name

Please add a last name

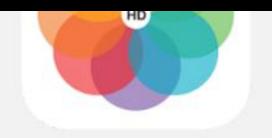
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This field needs min 6 characters

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### Thank You