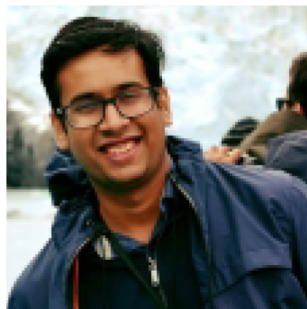# Text VQA Challenge
Team-Schwail

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Final Result

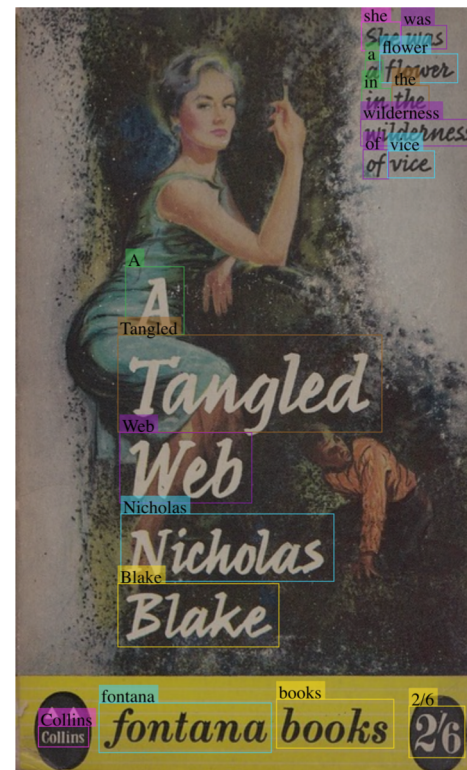| Method	Test Accuracy
Image Only Baseline	5.88
Pythia Baseline	14.01
LoRRA	27.63
Ours	30.54

What Worked - Staring at the data!

What Worked - Staring at the data!

- Including n-grams

What Worked - Staring at the data!

- Including n-grams

What is the book called?

A Tangled Web

What Worked - Staring at the data!

- Including n-grams
- **Spell Correcting OCR**

What Worked - Staring at the data!

- Including n-grams

- **Spell Correcting OCR**

What is the state on his jersey?

Texas

What Worked - Staring at the data!

- Including n-grams

- Spell Correcting OCR

- **Vocabulary Expansion**

What Worked - Staring at the data!

- Including n-grams

- Spell Correcting OCR

- **Ensembling & Vocabulary Expansion**
  - **Brands**
  - **States**

What brand of beer is it?

Heineken

What Worked - Staring at the data!

- Including n-grams

- Spell Correcting OCR

- **Ensembling & Vocabulary Expansion:**
    - Brands
    - States
    - **Adding OCR ∩ English vocabulary**

What Worked - Staring at the data!

- Including n-grams

- Spell Correcting OCR

- Ensembling & Vocabulary Expansion:
    - Brands
    - States
    - Adding OCR ∩ English vocabulary
- **Shuffling OCR**

What Worked - Staring at the data!

- Including n-grams

- Spell Correcting OCR

- Ensembling & Vocabulary Expansion:
    - Brands
    - States
    - Adding OCR ∩ English vocabulary

- Shuffling OCR

- **Data Augmentation from Scene-Text**

What Didn't Work

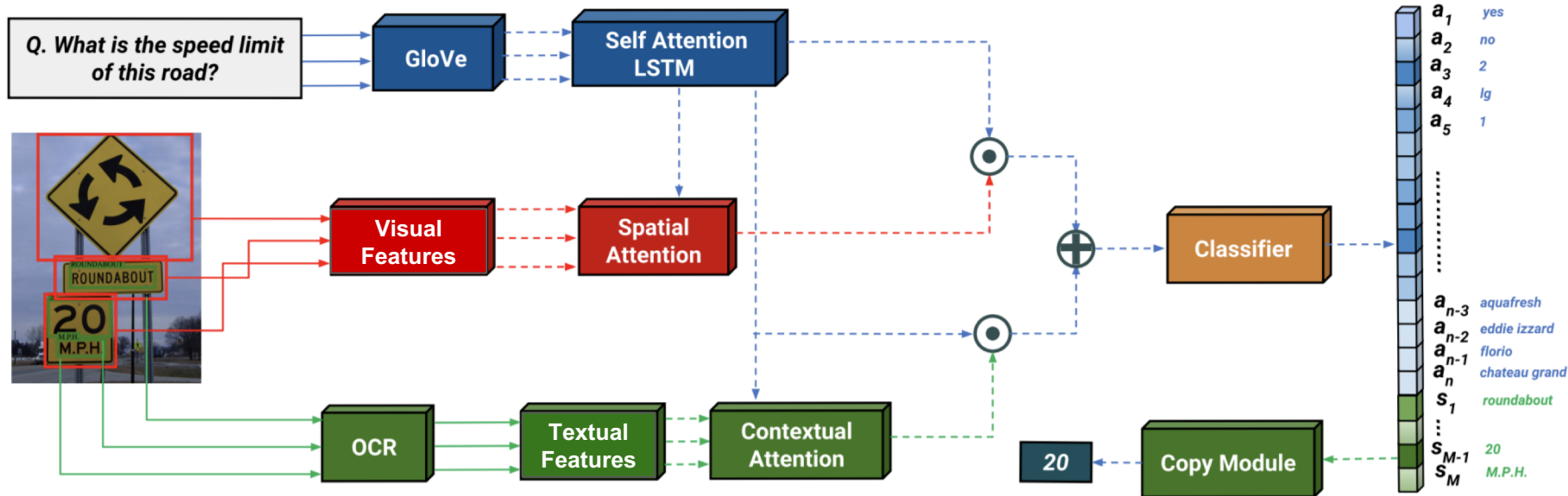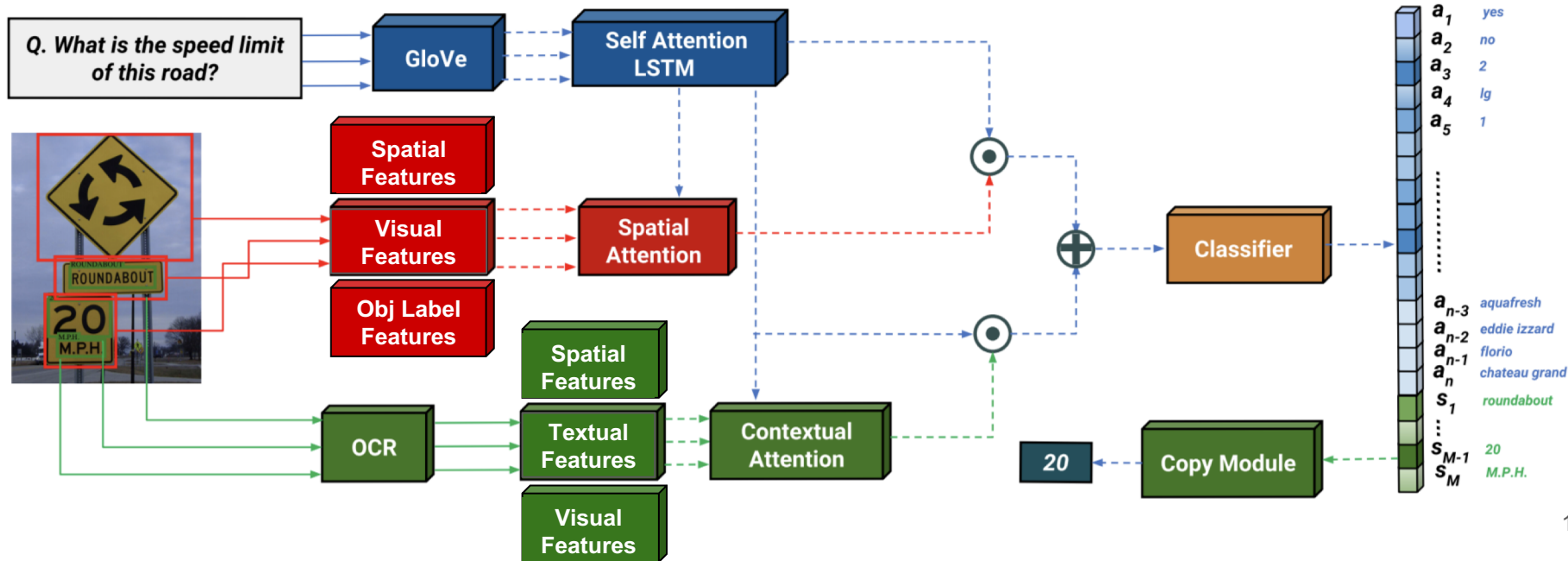LoRRA only uses visual features for object bounding boxes and textual features for OCR.

Figure Credit: Towards VQA Models That Can Read; Singh et al; CVPR '19
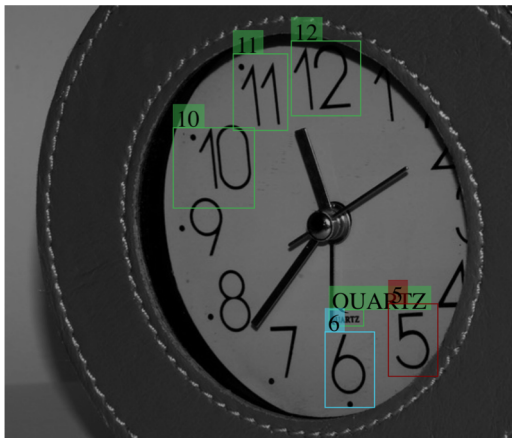
What Didn't Work

- Using visual features
- Using textual/object label features
- Using spatial Features

How you fuse feature matters!

Additional interesting sub-problems

- Learning to read time
- Learning to read logos
- Learning to reason about substrings in OCR

What is the clock's time?

11:38

What logo is on the phone?

Apple

What is the last letter in the name of the wine?

e

Thank you