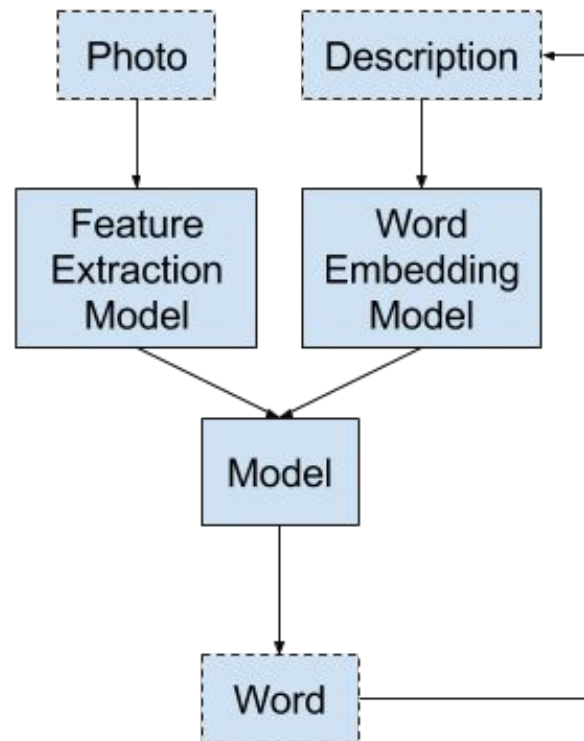


Ibrahim Taher
and
Forrest Hooton

Image Caption Generation

Goal

- Our goal is to implement a generic caption generation program
 - I.e. a horse standing next to its owner in a field
- Model that generates a word from a sequence



Microsoft CoCo Dataset



- 160,000 + images with pre-divided training, validation, and test sets
- At least 5 captions per image for training and validation sets
- We will use random subset

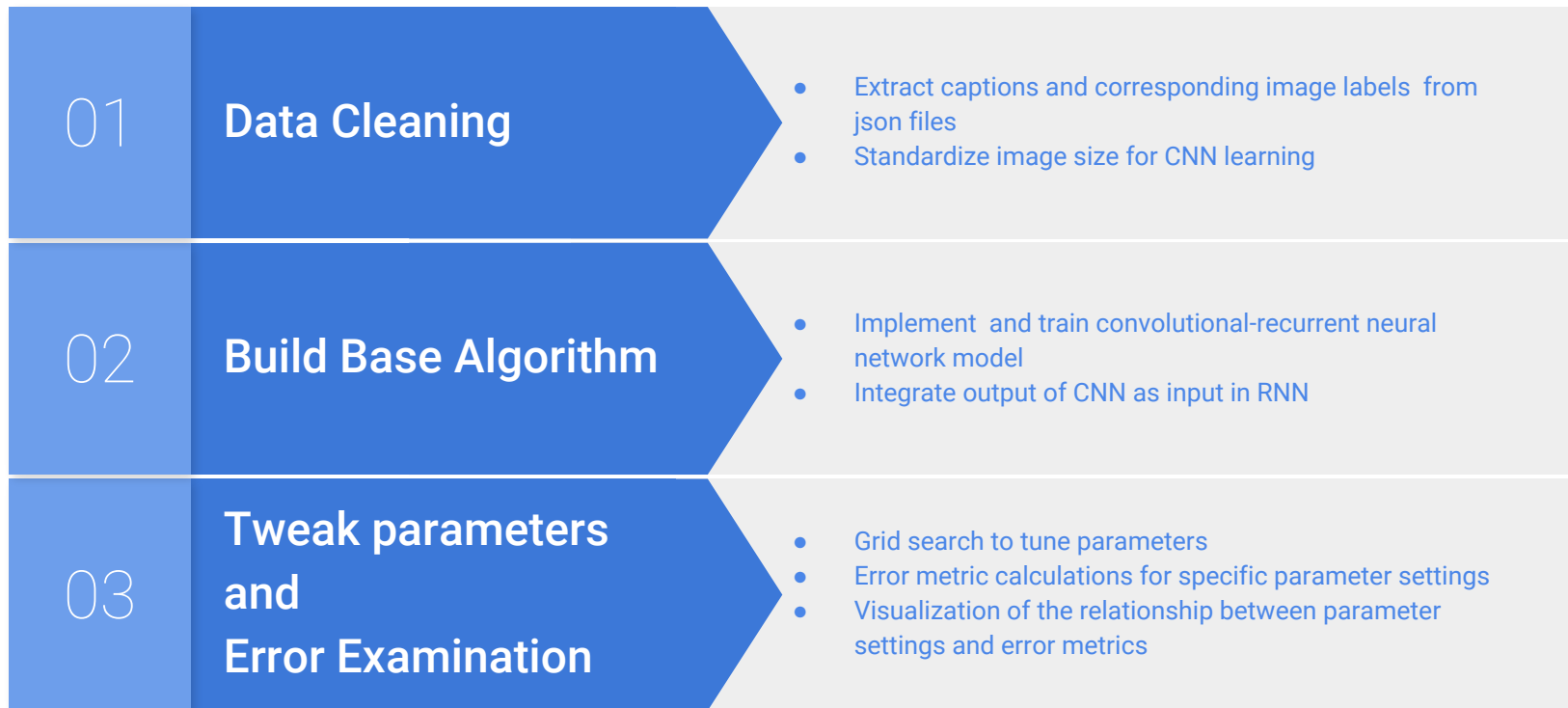


The man at bat readies to swing at the pitch while the umpire looks on.



A large bus sitting next to a very tall building.

Workflow



- Tweaking CNN
 - Feature size
 - Number of features
 - Window stride and size
- Tweaking RNN
 - Dropout probability
- Tweaking both
 - Number of neurons and layers
 - Learning rate
 - Epochs (For Truncated Backpropagation)
- Error Measurements
 - BLEU error metric
 - ROGUE error metric

