

# Babble: Learning Grammar Structure with Generative Adversarial Networks

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## Abstract

This is the text of the abstract

# 1 Introduction

## 1.1 Problem

Goal: Generate text that looks like it came from a language Problems:  
How to determine whether the text is from the language?

## 1.2 Grammar

Rule system to describe language Defined grammar -> any sentence can  
be judged If we had grammar, could use as penalty function Complexity  
Rather than come up with rules, rely on data

## 1.3 Generative Adversarial Networks

How they work Role of generator Role of discriminator

# 2 Background

???

# 3 Approach

Description role of generator inputs outputs role of discriminator inputs  
outputs overall diagram Grammar definition Abstract definition class dia-  
gram? Tools nltk Grammars SimpleGrammar description generation pro-  
cess \_Grammar English Network definition Tools keras Generator struc-  
ture diagram Discriminator structure diagram

# 4 Results

Experiments part where i did stuff to try and make it work

# 5 Discussion

# 6 Conclusions

Some text, from [1]

# References

- [1] François Chollet et al. Keras. <https://github.com/fchollet/keras>, 2015.