

Generating Language on Twitter

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Project Goals

- Implement Twitter Bots with human-like responses
- Quantify the degree to which these bots can generate original word combinations

Preliminary Steps

- Recurrent Neural Networks (RNNs) for Natural Language Processing
- A Hierarchical Latent Variable Encoder-Decoder Model for Generating Dialogues

Current Challenges

- Takes 2 weeks to properly train RNNs to generate conversations
- Training set requires $\sim 700,000$ conversations
- Amount of data needed to parse the Twitter API (takes around 2 - 3 days to build our training set)

Sample Dialogue using RNNs

- Input Text: what r u ??
- RNN-generated response: what r u ??
- Input Text: what are you doing??
- RNN-generated response: what are you doing??

Current Status and Next Steps

- Generate simple conversations
- Identify "interesting" conversations
- Replicate conversations through genetic algorithms