
Supplementary material: Gated Feedback Recurrent Neural Networks

Junyoung Chung
Caglar Gulcehre
Kyunghyun Cho
Yoshua Bengio*

Dept. IRO, Université de Montréal, *CIFAR Senior Fellow

JUNYOUNG.CHUNG@UMONTREAL.CA
CAGLAR.GULCEHRE@UMONTREAL.CA
KYUNGHYUN.CHO@UMONTREAL.CA
FIND-ME@THE.WEB

Text Generation

Hutter dataset is often referred as a benchmark for character-level language modeling (Sutskever et al., 2011; Graves, 2013). In this supplementary material, we provide some samples generated by the gated-feedback RNN with LSTM units which was trained on Hutter dataset. We sampled once from the model (except the last sample) after providing a seed sequence extracted from the test set which was not used for training the model. We use bold-faced font whenever the following (generated) characters are considered highly relevant to the context of earlier seed text. We use red color to distinguish the seed text snippet from the generated one.

Sample #1

England, Italy, France, Germany and others.

==Euroscepticism in the United Kingdom==

Humbert and Colombi

* [[Royal Charlemagne|Crown Union of the Eastern Radio Silver Station]] (719 AD) explodes almost do train open in reaction to do not form dry oil. This is an essential implication of [[posttransistor]] that is significantly assumes modification of question. For example, it does not entail a Being with a lower case, and declared they oll] on "The Glorification of Touchstuff" ([[2005 in literate press|prethis version]]) was of the progress of [ehers]]''. A top ranking of the decades was the beginning of Fulham [[Dan DeLis]] to put the a contract that could become a minimal operating system in common law. Membership however, stemmes Burroughs struggles to conduct a museums]] of this national lands are explicated in all groups, especially in traditional Ukrainian monetary values.

Sample #2

In Europe, Paris was the center stage for the [[French Revolution]], and it became an important centre of finance, commerce, and funding important.

The markets for the Union also include the invention of money lower risks among a possible sacrifice and electrotext and their chemical design, though armor facilities featuring a variety of [[oak tree]]s are applied to the data structures of the object, a risk|supporting, such as dollarize -200 years ago.

Sample #3

Istanbul is located in north-western [[Turkey]] and south-eastern Europe within the [[Marmara Region]] on a total area of 600km² andwards by merging the airport and carry [[Discount of Cuba#Year of Empire|Temastique]], "

''considered'' (secret). ([[Notable extreme points of North America|nut, because it were troppied by broken versions of him with either the Polish album by the U.S. Attorney's [[London Eye]]) was problematic of clarified and even translated, in it among [[Britain]], the Basque Parliament can be assigned a new [[Austrodeac]]

Damascus is also champains some years. He apparently failed to cover wrongdoing, Hamming Khan Atmanhorn]] of Lestergompolis of the Tropic of Churches to the undemocratism with Lieutenants as Spoiler of the Union of the Honored Matres, Bulgaria had to proilmes mounted undrinks something instead of the brother, being green and blue. The [[Russia collapse|race]] received an estimated deconstructive tension between the Pacific Ocean and the island of [[Northumbria]], which are less than original Habsburg fast deficits. These are under [[Louis XIV of France|Louis XIV of France]] and again drove the city from Rome.

Sample #4

Google was founded by [[Larry Page]] and [[Sergey Brin]] while they were [[Doctor of Philosophy|Ph.D.]] students at [[Stanford University]].

Together they own about 14,000 files

fimber|266]] [[January 15|15]] [[January 12|12]] [[January 1]]]. Leading the democratisation of the Czech Republic in 1948, the descendants of [[Charlotte of the Hanseatic Council]] were trophy in the House of Lords, begun as wives in [[North Africa]], [[Sicily]], [[Spanish Islam Mary]], [[Africa]] beence (15,401) in 1949. Brown was refusingly implisf of opushism with some demonstrations of angels existed by merry with individuals that not yet be seen on the naked surname Grigorius titled 'Cm by Krozian Islam, the husband of Apis also the process of deriving opposites octs, to Governmental Discovery and Health Statistics.

Sample #5

```
<page>
<title>Iconology</title>
<id>14802</id>
<revision>
<id>15912335</id>
<timestamp>2004-06-27T23:16:08Z</timestamp>
<contributor>
<username>Gaius Cornelius</username>
<id>2228</id>
</contributor>
<comment>/* Hoffers: "The main act's panda woman who renegates people in the song. That's good for them"
[[Enoch Grimes]] has a style of trained music and admirer [[Mark Drake]]. Chandler entered the Piazza Hauldry's wife, although remaining during the-1910 Carter's website, among others mainly called Stadium, a horse that England was showing stones by two of his descendents and was passed for the rest of shakeup out of purpose there. The exact date is now a matter of detail with popular major offensive products. In 1989, Ducati was replaced with the [[Bodleian Government]], which rose from [[radio waves]] to the [[NASCAR]] clinical development in the mid-1990s in southern [[Canada]].
```

Sample #6

Wikiquote
*[[http://www.indianajones.com/ IndianaJones.com; the official Indiana Jones site]
*[[http://www.theraider.net TheRaider.net;

the primary fan site of the series]
 * [http://indianajones.wikicitities.com The Indiana Jones Wiki]
 * [http://www.theindyexperience.com The Indy Experience]
 * [http://www.indygear.org/ Eugenics]],
 which presumably includes an inside Liberals or Civilian leader
 JRDC President. Two large faculty alien colonies led by Thomas
 Coatile fit of Heracles who lives with Menander, Zeus, has a world
 ticket. Officially there is another Challenge to the Queen's Law for
 all possessions.) There is often no relenat]] and weapons systems.
 * [[C Implementation for League Championship (novel)|The Edgar,
 feather-and-chestglum.shtml (see below)]] During the head and the
 feast day and/or use of mud, deppeus (knife), [[doucal]], [[tuna]]

Sample #7

==Disadvantages of IMAP==

- * IMAP is a very heavy and complicated protocol. Writing your own custom implementation of an IMAP server is of at least 20 orders of magnitude more complicated than a POP3 implementation. Client implementations are also much more complicated.
- * Due to its capabilities, mythology's possibility is still incomplete. Commentators on epistemic definitions typical of the past fall short of ethical altruism limit, arguing that the delegation should not be appropriate to oppress it, without expressive our knowledge about free market activities, as well as some - it is possible to check the limits on Wikipedia. Put in direct film video - Advance Australia

[[Category:Cheshire|]]

```
[[de:Salaomescija]]
[[fr:Chaucer]]
[[hr:Chad]]
[[id:Cadura]]
[[hu:Chadict&#o]]
[[nl:Cuaht&#moil]]
[[no:Cuahtge]]
<contributor>
  <username>Rich Farmbrough</username>
  <id>82835</id>
</contributor>
<minor />
<comment>Wikify dates</comment>
<text xml:space="preserve">#REDIRECT [[Marine Diving]]
```

Sample #8

***[[Christianity|Christian]] &#amp;#dash; 82%
 **[[Baptist]] &#amp;#dash; 15%
 **[[Protestantism|Protestant]] &#amp;#dash; 62%
 ***[[Methodism|Methodist]] &#amp;#dash; 10%
 ***[[Lutheranism|Lutheran]] &#amp;#dash; 6%
 ***[[Church of Christ]] &#amp;#dash; 6%
 ***[[Reformed Egyptian|Egyptian]] &#amp;#dash; 11%
 ***[[Syriac]] - Member of Augusta (cultural)
 **[[Priniceps senatus]] (or Archipelago for acids in the use
 of neutron species.) Long as a result of TLDs in the DNA of
 a large endometer. In this sense the electron shell structure
 densitises these "molecular systems".
 The mere density, and ence (implying that, in most sense,
 deemed political or social evidence.)

== See also ==
 * '''Chechen''' [des of the Prolog-Answer]]' ([[1952]])
 (ubc., #99 - PVF version)
 *'''Concrete Principles of Closed Life in Philosophy 1900-1960'''
 (1992) ISBN 0689720942 ([[NASA]] only to the
 '''International Union'''). Since his works like
 '''[[London Mathers]]''' and '''[[Last Labor Day]]'''.
 The members of the royal family were in the middle ague Linux,

the standard execution signal was the compiler whose logo
 contained symbols for the [[Microsoft Windows
 release|Windows Network]] (Windows) and
 [[Access Internet Computers|ICA]] listing.

Sample #9

[[[[Canada]], [[England], [France, Missouri]],
 revised as a symbol of past humans more controversial after
 having criticised the trend ended in breeding and protecting
 various categories. '''Antiqui''' marked the beginning of the

epistle to Marian: "tell me that it may, to make
 pre-remaining neighbours?" The need to reconcile you to
 the details of belief in datura, and talk about it in the
 appendix to his knowledge and not in any other manner."
 Latter-day Saints with an essential equation have the corresponding
 reference for the time, if the acceleration oured a centuries-CLs
 (from [[Hitachi, Ltd.|Little Hitchcock]])]

Sample #10

The meaning of life is subject to rights in [[economics]]
 and to generalize the inquiry on liberal liberals in real-life
 [[revolution]].

Leibniz believed in warming imestamp.

References

Graves, Alex. Generating sequences with recurrent neural
 networks. *arXiv preprint arXiv:1308.0850*, 2013.

Sutskever, Ilya, Martens, James, and Hinton, Geoffrey E.
 Generating text with recurrent neural networks. In *Pro-
 ceedings of the 28th International Conference on Ma-
 chine Learning (ICML'11)*, pp. 1017–1024, 2011.