

Allison Parrish

By Amanda, Illiez and Naomi

Background

- American poet, programmer, author and educator
- BA in Linguistics from UK Berkeley and Masters in Professional Studies from NYU's Interactive Telecommunications program
- Exploring the unusual phenomena that emerges when language and computers meet



More Background Information

- Color TRS-800 Computer 2 sparked Parrish's interest in coding and language
- ZZT Game creation software sparked her interest in working with language/poetry
- Thinking of constructed language, or poetry, as procedural



Color TRS-80 Computer 2

Game World #1: Town of ZZT

Centipedes





Lions

Tigers

..Others

An Epic MegaGames Production

Items:  - Ammunition
 - Torch
 - Gem
 - Scroll

 - Door
 - Key
 - Passage
 - Boulder

Developed by Tim Sweeney

ZZT

Pick a command:

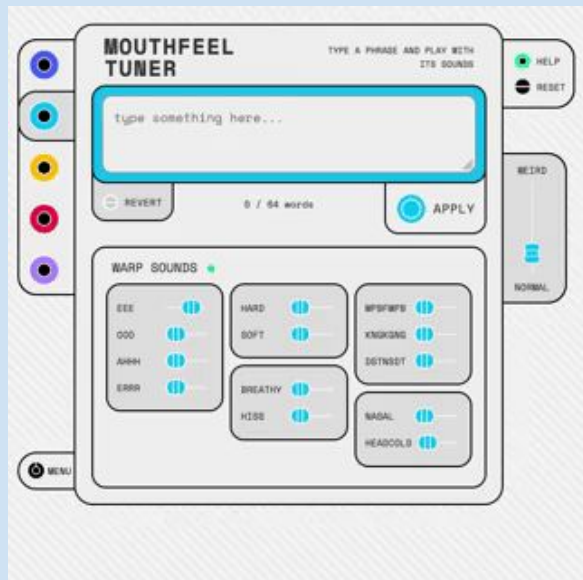
W World:
TOWN

P Play
R Restore game
Q Quit

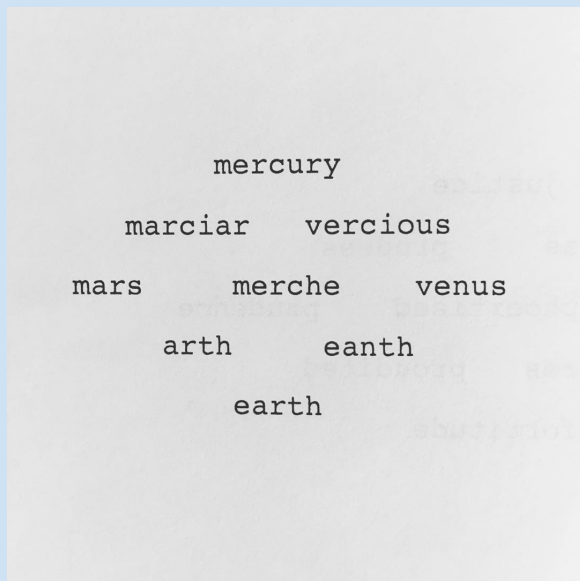
A About ZZT!
H High Scores
E Board Editor

S Game speed:
▼
F.....:.....S

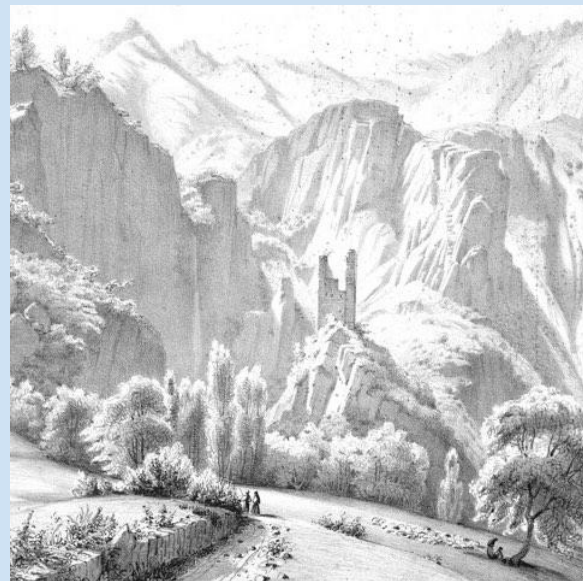
Works



Nonsense Laboratory



Compasses



Our Arrival

Works: Bots

everyword
@everyword

Twittered every word in the English language. Task began in 2007 and completed in 2014.

decontextualize.com/2014/06/task-C...

Joined November 2007

Tweets 109K Following 12 Followers 82.2K

Tweets Tweets & replies

everyword @everyword · Jun 7
étui
1.1K 1.1K ...

everyword @everyword · Jun 7
études
135 141 ...

everyword @everyword · Jun 7
étude
149 159 ...

everyword @everyword · Jun 7
étagères
62 49 ...

@everyword

🤖: Hello computer.

👤: Uh - oh - Hi! My name is Brad Majors. And this is my fiancée, Janet Weiss. I - ah - wondered if you could help us. Our car has broken down about two miles up the road. Do you have a phone we might use?

🤖: You're a computer named Brad. And you need a phone?

👤: No, no... I'm just so tired, and lost, and... I didn't realize what I was doing!

🤖: Okay. Is there anything else I can do for you?

👤: You want me to tell you it's okay to leave? Okay, go on! GO!

🤖: No, I don't want to leave. I want to stay.

👤: All right, darling.

🤖: Getting awful personal, don't you think?

👤: It couldn't have been out at Glades, if that's what you're thinking. I was never out there.

🤖: What's "Glades"?

👤: A bonus, Dr. Jones. That is poison. You just drank the rest of it.

🤖: Ha! I'm immune to this poison.

👤: How did I get stuck with YOU as a moving buddy?

🤖: Good question. I should go.

👤: It's good you found it.

🤖: Bye!

Semantic Similarity Chatbot

Reconstruction (2020)

- Parrish's *Reconstruction* is an infinite poem generator.
- It was built uses Python, Text Generation, and Project Gutenberg.
- Project Gutenberg is a database of text that offers 3 million poetic lines.
- Each verse influences the outcome of the next generated poetic line.

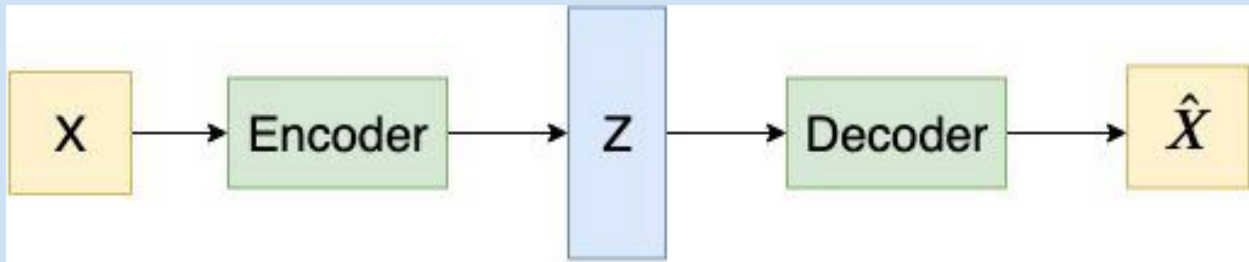
One year I wandered to the woods, and go
In those woods, I was a weary
WA, steadily I see of this weary
Come to the woods, the wilderness, flow,
In that, as I have not made war,
For a dream, I see a new day,
And that, I have not made war,
And not a new day, I see a new day,
The morning, I see a new day,
I see a new day, I see a new day,
In the woods, I see a new day,
Ah, well, and weeping, that they were
As I see a new day, I see a new day,
I can piece a world to be a power
And show an enshaken,
Where, with such the mariner war of ether,
The sacred zone of morning,
Passing of truth, and the light,
The old old church is there,
How I can stay a man's gone to be
Now I see of green and return years,
Cries for my country, as I take my heart
How due to rest a dream of mine
We shall know of the time of day,
Dye, in the old year of the old sea
Heart to take you all, and hence I get
Seven years, and other men and all
Must be a time for me or I can see
There, in a year of old
Within, and of the world is one
Beloved, of the morning tree
Hunting of the, a thousand-born and
Envy, I'll take
Within this is God to be
Green, a little hour
Above, and there is no more of me
All were weeping, and a sweet and sweet,
Courage, so long, and this is
Individual, and this is true
Watching the sun, and the sun
Quickly, and the sun, and the sun
Thinks to the wood, and of a
One, and the sun, and the sun
Fail, and the sun, and the sun
More, and the sun, and the sun
Dance, and the sun, and the sun
Come, and the sun, and the sun
Dark, and the sun, and the sun

Technical Aspect of *Reconstruction* (2020)

The main 3 components of autoencoders: encoder, code, and decoder.

The autoencoder generates poetry is in 3 different way:

1. generating a line of poetry at random.
2. reversing the words in that line.
3. “reconstructing” the reversed line.



Full of them as
they were the
home of thee,

All all the
ships are in
the table's
breast

Full of these
ships and the
sun-waves,

Full of all two
and the
first-shoes

Full of all the
barren and thee



All was three
years and the
sun's head

All many years
on the table's
breast,

After all two
years and the
sun's breast

All was seen in
the table of
his bed;

Full of them as
they were the
home of thee,

All all the
ships are in
the table's
breast

Full of these
ships and the
sun-waves,

Full of all two
and the
first-shoes

Full of all the
barren and thee



All was three
years and the
sun's head

All many years
on the table's
breast

After all two
years and the
sun's breast

All was seen in
the table of
his bed;

```
for i in range(10):  
    center = bpvs.mu(["It was a dark and stormy night."])  
    print(bpvs.sample(center, 0.35)[0])
```

It was a long moonlight and night.
It was a great night and lonely day.
It was a golden night and lonely year.
It was the darkest night of night.
It was a sad and happy dawn.
It was a dark night of death.
It was a moment of sunlight.
It was a dark in nightless day.
It was a dark and stormy day.
It was a veil of spring.

Jhave

aka David Johnston

videographer, motion graphics artist & digital poet

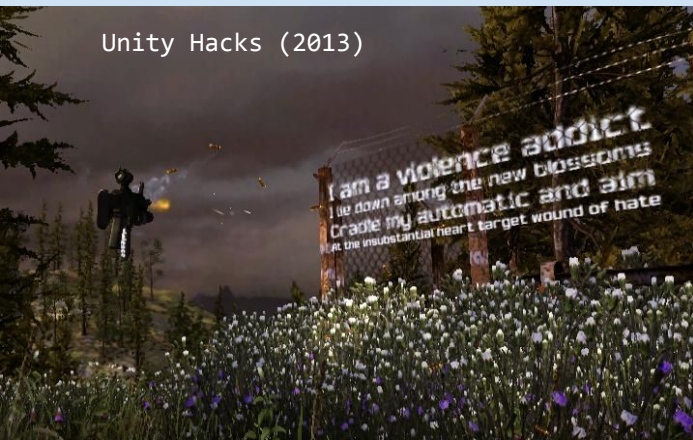
Concordia alum (B.Sc. CompSci 2004, Ph.D. INDI 2011)

[Aesthetic Animism: Digital Poetry as Ontological Probe](#)

Bifrost for Bill (2017)



Unity Hacks (2013)



Assistant prof in the School of Creative Media,
City University of Hong Kong (2012-2016)

Advisor for Building21

Affiliate faculty in CART

E-lit / [Digital Poetry](#)

Give me Your Light (2011)



Big Data Poetry

machine learning and poetry generation

neural networks as tools for literary creation.

```
#####  
#  
# READ NLTK LISTS  
#  
#####
```

```
list_data=open(READ_LIST_PATH).read()  
LISTS_ls = list_data.split("=")  
#print len(LISTS_ls)  
RB=LISTS_ls[1].split(",")  
#print ">>>>>>>> RB type=",type(RB)  
JJ=LISTS_ls[3].split(",")  
VBD=LISTS_ls[5].split(",")  
VBZ=LISTS_ls[7].split(",")  
#print LISTS_ls[9].split(",")
```

2012-2016:

Parsing: (word counting, NER & POS)

Software: NLTK & WordNet

Corpus: 10,573 poems & 62,136 songs

2017-2019:

Generation

Software: Tensorflow, Keras & PyTorch

Corpus: 639,813 lines of poetry

```
#####  
# Load data  
#####  
  
corpus = data.Corpus(args.data)  
  
eval_batch_size = 10  
test_batch_size = 1  
train_data = batchify(corpus.train, args.batch_size, args)  
val_data = batchify(corpus.valid, eval_batch_size, args)  
test_data = batchify(corpus.test, test_batch_size, args)  
  
#####  
# Build the model  
#####  
  
ntokens = len(corpus.dictionary)  
model = model.RNNModel(args.model, ntokens, args.emsize, args.nhid, args.nlayers, args.dropout, args.dropouth, args)  
if args.cuda:  
    model.cuda()  
total_params = sum(x.size()[0] * x.size()[1] if len(x.size()) > 1 else x.size()[0] for x in model.parameters())  
print('Args:', args)  
print('Model total parameters:', total_params)
```

ReRites (2019)

- 12 poetry books in a custom boxset
- 120 hours of [AI text-generation videos](#)
- 15 hours of [human text-editing videos](#)



- [GitHub repository](#)
- hand-gesture-controlled reading
- [participatory intervention](#)
- book of 8 response essays

<p>The next life is a moment</p> <p>The moon is stretched like muffled nakedness. The coming is as shattered a place: The history of the soul.</p> <p>What has Power done? Who hangs this delicious world?</p> <p>"It invents the dirt. In the pressure of the sea, a hollow wisdom sore,-- from the musing."</p> <p>It might have been otherwise. I need a few moments to be black like stone.</p> <p>The red pond fights the little boy planted in his body.</p> <p>I disappeared.</p> <p>under the ground is dull, a sea searching stings for movement</p> <p>the sheep in the south breath where the sun begins to blur</p>	<p>Selves</p> <p>they come back hard, staring</p> <p>sold within serene stone consumed by wonder</p> <p>intimate electrical elder grateful, things</p> <p>eluded knick-knacks, pioneering blurs.</p> <p>a trick of lingering potential</p> <p>In The Hands of an Alley,</p> <p>there was a dirt lying on the fast sheets of the pinched earth, wondering if it had been a code Of the mind to take time to the end of taste.</p> <p>Having drove over all our flames. Another soul was inside us.</p> <p>This was when two Who ate these things</p>	<p>Eternity Dangling</p> <p>through the trees and then in someone's mind a now, soon appears.</p> <p>I play at fighting it, its gentle endurance, a long blue silence.</p> <p>I am bound by my hate.</p> <p>I shall not speak of this harsh space Of true tongues and human guile</p> <p>the idea of heaven waking to eat again.</p> <p>eddies wrought unrehearsed. voices believed act the things in me.</p> <p>Bramble</p> <p>An old archivist scours the impassive Setting sun</p> <p>To erase the mining honeyed hanging flood That the portent strike of time became.</p>	<p>The sudden machine broke, Healed and listened to itself</p> <p>Looked For:</p> <p>an executioner; disturbed in humble years,</p> <p>firelight, young pelted pines</p> <p>Wrapping me and I became my face</p> <p>a gentle harmony of dread</p> <p>That it would be true as my own dream,</p> <p>"Y'all Through all"</p> <p>Ages of bells. I far-off closed my soul.</p> <p>From level eight I greeted</p> <p>Asleep in phallus, faces,</p>
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Discussion Question

Do you think the original line of poetry can be generated by the program after it creates millions of possible combinations? Why/why not?

If anyone can harness artificial intelligence to create poetry, images or other forms of artworks with a degree of *technical mastery*, what does this say about the essence of creativity and originality?

How could/should artistic authorship be determined in the context of machine learning?

