# 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

# ZZT

Game World #1:   Town of ZZT

| Centipedes | Lions | Tigers | ..Others |
|---|---|---|---|
| 00θ θ 00000 | Ω Ω Ω Ω | ππ π π | ♣ ☺ δ Ö ø |

An Epic MegaGames Production

Items: ä – Ammunition      ◙ – Door
       ¥ – Torch           ♀ – Key
       ♦ – Gem             ≣ – Passage
       ō – Scroll          ■ – Boulder

Developed by Tim Sweeney
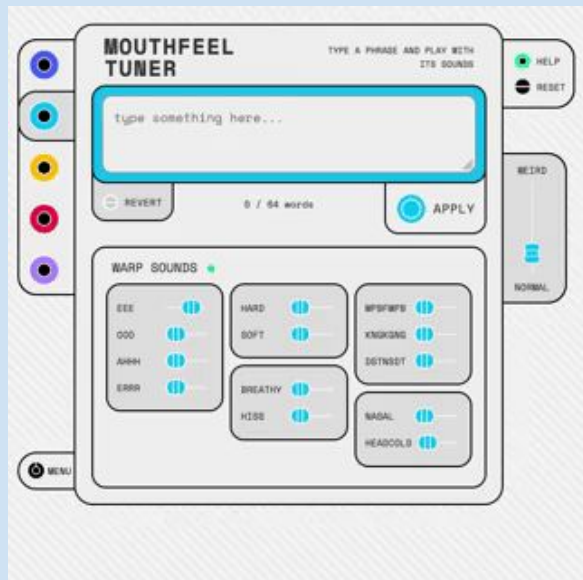
# Works



Nonsense Laboratory
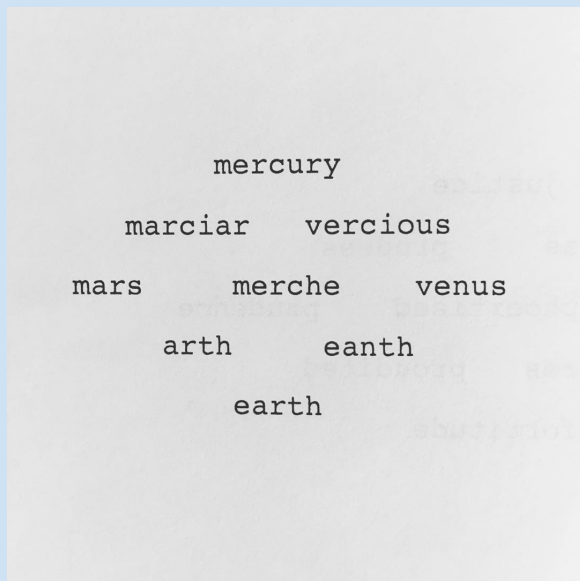


Compasses
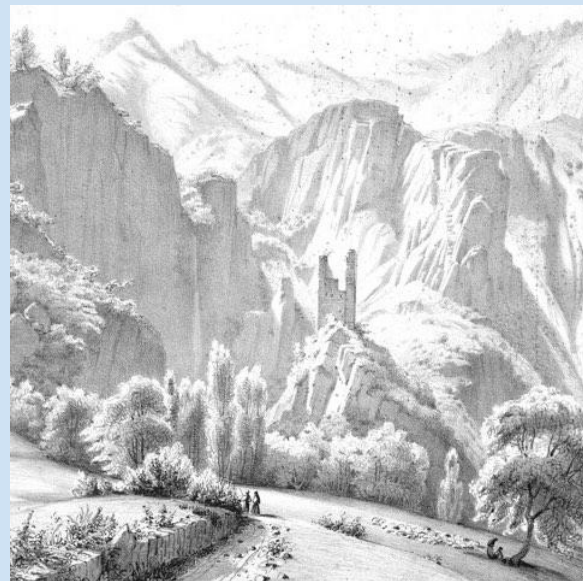


Our Arrival

# Works: Bots



@everyword



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.



https://reconstructions.decontextualize.com/

# Technical Aspect of *Reconstruction* (2020)

The main 3 components of autoencoders: <u>encoder</u>, <u>code,</u> and <u>decoder</u>.

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.
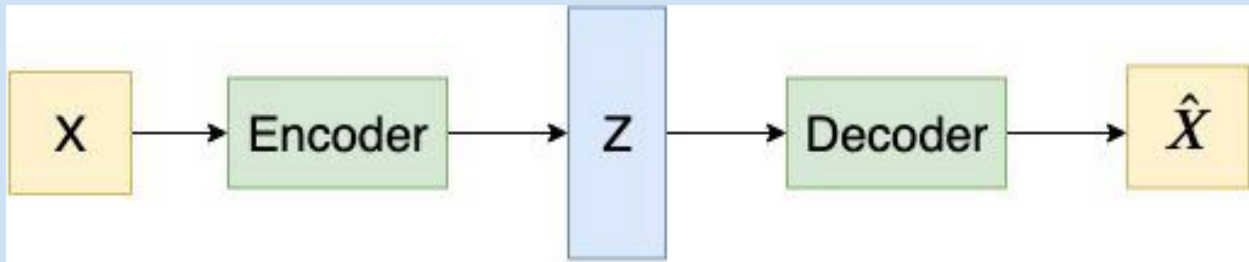
| | | |
|---|---|---|
| Full of them as they were the home of thee, | All all the ships are in the table's breast | Full of these ships and the sun-waves, |
| Full of all two and the first-shoes | Full of all the barren and thee | All was three years and the sun's head |
| All many years on the table's breast, | After all two years and the sun's breast | All was seen in the table of his bed; |

```
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.

Bifrost for Bill (2017)

# 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


Unity Hacks (2013)

I am a violence addict
lie down among the new blossoms
Cradle my automatic and aim
at the insubstantial heart target wound of hate
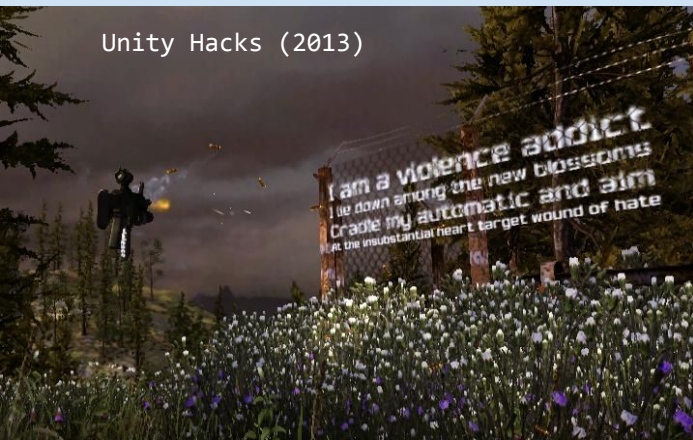
Assistant prof in the School of Creative Media,
    City University of Hong Kong (2012-2016)
Advisor for Building21
Affiliate faculty in CART

E-lit / Digital Poetry


Give me Your Light (2011)

```
###############################################
#                                             #
#    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(",")
#FW=LISTS_ls[9].split("_")
```

# Big Data Poetry

**machine learning** and **poetry generation**

neural networks as tools for literary creation.

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, arg
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

**The next life is a moment**

The moon is stretched like muffled nakedness.
The coming is as shattered a place:
The history of the soul.

What has Power done?
Who hangs this delicious world?

"It invents the dirt.
In the pressure of the sea,
    a hollow wisdom
sore,-- from the musing."

It might have been otherwise.
I need a few moments
to be black like stone.

The red pond fights
the little boy
planted in his body.

I disappeared.

under the ground is dull,
a sea searching
stings for movement

the sheep
in the south breath
where the sun begins to blur

**It Because**

It Healed.

But There Was
Remarkable
Irrationality.

**Selves**

  they come back
  hard, staring

  sold within serene stone
  consumed by wonder

  intimate electrical
  elder grateful, things

  eluded knick-knacks,
   pioneering blurs.

  a trick
  of lingering
   potential

**In The Hands of an Alley,**

            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.

Having drove over all our flames.
Another soul was inside us.

This was when two
Who ate these things

**Eternity Dangling**

  through the trees
  and then in someone's mind a now,
  soon appears.

  I play at
  fighting it, its gentle endurance,
  a long blue silence.

      I am bound by my hate.

  I shall not speak of this harsh space
  Of true tongues and human guile

  the idea of heaven
  waking to eat again.

      eddies wrought unrehearsed.
          voices believed
      act the things in me.

**Bramble**

  An old archivist
    scours the impassive
      Setting sun

   To erase the mining honeyed hanging flood
  That the portent strike of time became.

The sudden machine broke,
Healed and listened to itself

**Looked For:**

  an executioner;
  disturbed in humble years,

  firelight,
  young pelted pines

  Wrapping me
  and I became my face

  a gentle harmony
  of dread

  That it would be
  true as my own dream,

  "Y'all
  Through all"

  Ages of bells.
  I far-off
  closed my soul.

  From level eight
  I greeted

Asleep in phallus, faces,

# 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?