

The software is written in Lisp by Bruce Donald and uses techniques from artificial intelligence and linguistics to generate a long poem. A variety of automated syntactic transformation techniques are used to vary the style and structure of the cantos. The poem-writing software, called Alfred, is driven by a vocabulary reminiscent of mid 20th century poets such as Wallace Stevens. An argument to the Software makes the number of lines in the poem as long or short as desired. The poems is then placed into PowerPoint with no alteration to generate an image of the poem. The software is enclosed. Long poems tend to work better because characters, themes, and images tend to recur.

All software written and run by Bruce Donald. The Alfred software is free and open source, under the Gnu Public license GPL2.

This poem took approximately 30 seconds to generate. It was run on the computer science dept unix machine login-02. It ran in Emacs Lisp under GNU Emacs 25.2.2 (x86_64-pc-linux-gnu, GTK+ Version 3.22.21)of 2017-09-22, modified by Debian. The code was run on virtual machine with 8 CPU(s), Memory 32 GB, Hard disk 80 GB, Network 10GB/s. Physical machine: TYAN Model B7106G24EV4HR, Processor 2x Intel(R) Xeon(R) Gold 6138 CPU @ 2.00GHz, CPU 40 CPUs x 2 GHz, Memory 382.65 GB, Network 10GB/s, Hard disk RAID-10 (6 PNY 960GB SSD disks), 2.5T.

Lisp is a programming language that is taught in Prof. Donald's CS 230 class, a required sophomore class for majors in computer science.

Bruce Donald is a professor of computer science and mathematics at Duke University. He was trained at the MIT artificial intelligence lab for his PhD.