

Help Sheet for Simulation Program “verbnoun”

1. Content of *verbnoun.zip* file and compiling information

This is a simulation program developed in standard ANSI C. It can be compiled in unix/linux operating systems (with compilers such as `gcc` and `cc`) and in Windows (with standard C compilers).

The zip file “*nounverb.zip*” contains the following files:

Name	Type	Modified	Size	Ratio	Packed	Path
1999_s0_210.wts	WTS File	17/10/2003 1...	526,898	92%	40,464	
1999_s1_210.wts	WTS File	17/10/2003 1...	526,142	92%	41,583	
1999_s10_210.wts	WTS File	17/10/2003 1...	530,170	92%	44,980	
1999_s11_210.wts	WTS File	17/10/2003 1...	524,300	92%	40,294	
1999_s12_210.wts	WTS File	17/10/2003 1...	526,049	91%	45,969	
1999_s13_210.wts	WTS File	17/10/2003 1...	525,662	92%	39,562	
1999_s14_210.wts	WTS File	17/10/2003 1...	523,805	92%	41,278	
1999_s15_210.wts	WTS File	17/10/2003 1...	524,279	92%	42,080	
1999_s16_210.wts	WTS File	17/10/2003 1...	526,565	91%	45,328	
1999_s17_210.wts	WTS File	17/10/2003 1...	525,112	92%	39,421	
1999_s18_210.wts	WTS File	17/10/2003 1...	525,454	92%	40,766	
1999_s19_210.wts	WTS File	17/10/2003 1...	523,746	92%	42,245	
1999_s2_210.wts	WTS File	17/10/2003 1...	524,153	92%	44,357	
1999_s3_210.wts	WTS File	17/10/2003 1...	524,497	92%	40,647	
1999_s4_210.wts	WTS File	17/10/2003 1...	525,751	92%	41,550	
1999_s5_210.wts	WTS File	17/10/2003 1...	523,192	92%	39,809	
1999_s6_210.wts	WTS File	17/10/2003 1...	525,651	92%	42,949	
1999_s7_210.wts	WTS File	17/10/2003 1...	525,958	92%	43,828	
1999_s8_210.wts	WTS File	17/10/2003 1...	525,565	93%	39,075	
1999_s9_210.wts	WTS File	17/10/2003 1...	527,777	91%	47,524	
compile	File	17/10/2003 1...	36	19%	29	
koss.sti	STI File	17/10/2003 1...	1,944	91%	183	
nounverb.c	C File	17/10/2003 1...	47,584	77%	10,983	
run-cogsci-data-gen2000	File	17/10/2003 1...	196	21%	154	
run-cogsci-data-gen2000.dat	DAT File	17/10/2003 1...	8,839	93%	581	

The source code is in the file “*nounverb.c*”. To compile it under unix, you can use the command in the file “*compile*”.

The file “*koss.sti*” contains the information of the shape and position of the objects. This file must always be in the same director where the program is executed.

2. Sample data from published paper

The files *.wts* are the evolved weight files for the simulation described in the paper:

Cangelosi A., Parisi D. (2001). How nouns and verbs differentially affect the behavior of artificial organisms. In J.D. Moore & K. Stenning (Eds.), *Proceedings of the 23rd Annual Conference of the Cognitive Science Society*, London: Lawrence Erlbaum Associates, 170-175.

To run a sample simulation using these data, you can execute the command listed in the file “*run-cogsci-data-gen2000*”. The file “*run-cogsci-data-gen2000.dat*” already contains the results of such sample simulation.

3. Example of Program Output (.Dat File)

The following is the output that the program generates when the sample simulation of file “run-cogsci-data-gen2000” is executed. Overall, results are organised into two sections:

- (a) Fitness and behaviour data for each individual organism. Only the “Placed” data should be considered in this simulation. Only the data of the first 6 tasks (“Eta”) are shown.
- (b) Detailed test data for a test organism (org. number 0, in this example)

Arm Proj -																					
(s0_210) Arm setup																					
All_1999:																					
Org 0:	Fitness	192	Touched	0	Placed	96	99	TouchedEta	0	0	0	0	0	0	PlacedEta	17	18	18	16	18	18
Org 1:	Fitness	198	Touched	0	Placed	99	99	TouchedEta	0	0	0	0	0	0	PlacedEta	18	18	18	18	18	18
Org 2:	Fitness	198	Touched	0	Placed	99	99	TouchedEta	0	0	0	0	0	0	PlacedEta	18	18	18	18	18	18
Org 3:	Fitness	198	Touched	0	Placed	99	99	TouchedEta	0	0	0	0	0	0	PlacedEta	18	18	18	18	18	18
Org 4:	Fitness	198	Touched	0	Placed	99	99	TouchedEta	0	0	0	0	0	0	PlacedEta	18	18	18	18	18	18
Org 5:	Fitness	196	Touched	0	Placed	99	98	TouchedEta	0	0	0	0	0	0	PlacedEta	18	18	18	18	18	18
Org 6:	Fitness	198	Touched	0	Placed	99	99	TouchedEta	0	0	0	0	0	0	PlacedEta	18	18	18	18	18	18
Org 7:	Fitness	196	Touched	0	Placed	98	99	TouchedEta	0	0	0	0	0	0	PlacedEta	17	18	18	18	18	18
Org 8:	Fitness	196	Touched	0	Placed	99	98	TouchedEta	0	0	0	0	0	0	PlacedEta	17	18	18	18	18	18
Org 9:	Fitness	190	Touched	0	Placed	99	95	TouchedEta	0	0	0	0	0	0	PlacedEta	17	18	18	18	18	18
Org10:	Fitness	198	Touched	0	Placed	99	99	TouchedEta	0	0	0	0	0	0	PlacedEta	18	18	18	18	18	18
Org11:	Fitness	198	Touched	0	Placed	99	99	TouchedEta	0	0	0	0	0	0	PlacedEta	18	18	18	18	18	18
Org12:	Fitness	198	Touched	0	Placed	99	99	TouchedEta	0	0	0	0	0	0	PlacedEta	18	18	18	18	18	18
Org13:	Fitness	188	Touched	0	Placed	94	99	TouchedEta	0	0	0	0	0	0	PlacedEta	18	18	18	17	18	18
Org14:	Fitness	198	Touched	0	Placed	99	99	TouchedEta	0	0	0	0	0	0	PlacedEta	18	18	18	18	18	18
Org15:	Fitness	198	Touched	0	Placed	99	99	TouchedEta	0	0	0	0	0	0	PlacedEta	18	18	18	18	18	18
Org16:	Fitness	182	Touched	0	Placed	99	91	TouchedEta	0	0	0	0	0	0	PlacedEta	18	18	18	18	18	18
Org17:	Fitness	198	Touched	0	Placed	99	99	TouchedEta	0	0	0	0	0	0	PlacedEta	18	18	18	18	18	18
Org18:	Fitness	198	Touched	0	Placed	99	99	TouchedEta	0	0	0	0	0	0	PlacedEta	18	18	18	18	18	18
Org19:	Fitness	196	Touched	0	Placed	98	99	TouchedEta	0	0	0	0	0	0	PlacedEta	17	18	18	18	18	18
Org20:	Fitness	198	Touched	0	Placed	99	99	TouchedEta	0	0	0	0	0	0	PlacedEta	18	18	18	18	18	18
Org21:	Fitness	198	Touched	0	Placed	99	99	TouchedEta	0	0	0	0	0	0	PlacedEta	18	18	18	18	18	18
Org22:	Fitness	198	Touched	0	Placed	99	99	TouchedEta	0	0	0	0	0	0	PlacedEta	18	18	18	18	18	18
Org23:	Fitness	198	Touched	0	Placed	99	99	TouchedEta	0	0	0	0	0	0	PlacedEta	18	18	18	18	18	18
Org24:	Fitness	198	Touched	0	Placed	99	99	TouchedEta	0	0	0	0	0	0	PlacedEta	18	18	18	18	18	18
Org25:	Fitness	198	Touched	0	Placed	99	99	TouchedEta	0	0	0	0	0	0	PlacedEta	18	18	18	18	18	18
Org26:	Fitness	198	Touched	0	Placed	99	99	TouchedEta	0	0	0	0	0	0	PlacedEta	18	18	18	18	18	18
Org27:	Fitness	198	Touched	0	Placed	99	99	TouchedEta	0	0	0	0	0	0	PlacedEta	18	18	18	18	18	18
Org28:	Fitness	196	Touched	0	Placed	99	98	TouchedEta	0	0	0	0	0	0	PlacedEta	18	18	18	18	18	18
Org29:	Fitness	196	Touched	0	Placed	98	99	TouchedEta	0	0	0	0	0	0	PlacedEta	18	18	18	17	18	18
Org30:	Fitness	194	Touched	0	Placed	97	99	TouchedEta	0	0	0	0	0	0	PlacedEta	16	18	18	18	18	18
Org31:	Fitness	196	Touched	0	Placed	98	99	TouchedEta	0	0	0	0	0	0	PlacedEta	18	18	18	17	18	18
Org32:	Fitness	198	Touched	0	Placed	99	99	TouchedEta	0	0	0	0	0	0	PlacedEta	18	18	18	18	18	18
Org33:	Fitness	198	Touched	0	Placed	99	99	TouchedEta	0	0	0	0	0	0	PlacedEta	18	18	18	18	18	18
Org34:	Fitness	198	Touched	0	Placed	99	99	TouchedEta	0	0	0	0	0	0	PlacedEta	18	18	18	18	18	18
Org35:	Fitness	198	Touched	0	Placed	99	99	TouchedEta	0	0	0	0	0	0	PlacedEta	18	18	18	18	18	18
Org36:	Fitness	196	Touched	0	Placed	99	98	TouchedEta	0	0	0	0	0	0	PlacedEta	17	18	18	18	18	18
Org37:	Fitness	198	Touched	0	Placed	99	99	TouchedEta	0	0	0	0	0	0	PlacedEta	18	18	18	18	18	18
Org38:	Fitness	198	Touched	0	Placed	99	99	TouchedEta	0	0	0	0	0	0	PlacedEta	18	18	18	18	18	18
Org39:	Fitness	198	Touched	0	Placed	99	99	TouchedEta	0	0	0	0	0	0	PlacedEta	18	18	18	18	18	18

0	0	0	3	6	6
0	0	0	6	6	6
0	0	0	6	6	6
0	0	0	3	6	6
0	0	0	6	6	6
0	0	0	6	6	6
0	0	0	3	6	6
0	0	0	6	5	5
0	0	0	6	6	6
0	0	0	3	6	6
0	0	0	6	6	6
0	0	0	6	6	6
0	0	0	3	3	3
0	0	0	3	3	3
0	0	0	3	3	3

s0_210 finished

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