

Robótica Móvil

Práctica 4: Reconocimiento de voz usando pocketsphinx

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Algunas frases que se pueden decir

Justina yes

I want cookies and chips

I want tuna fish and m and m

I want pringles and noodles

I want a beer

I want a tea

I want a water

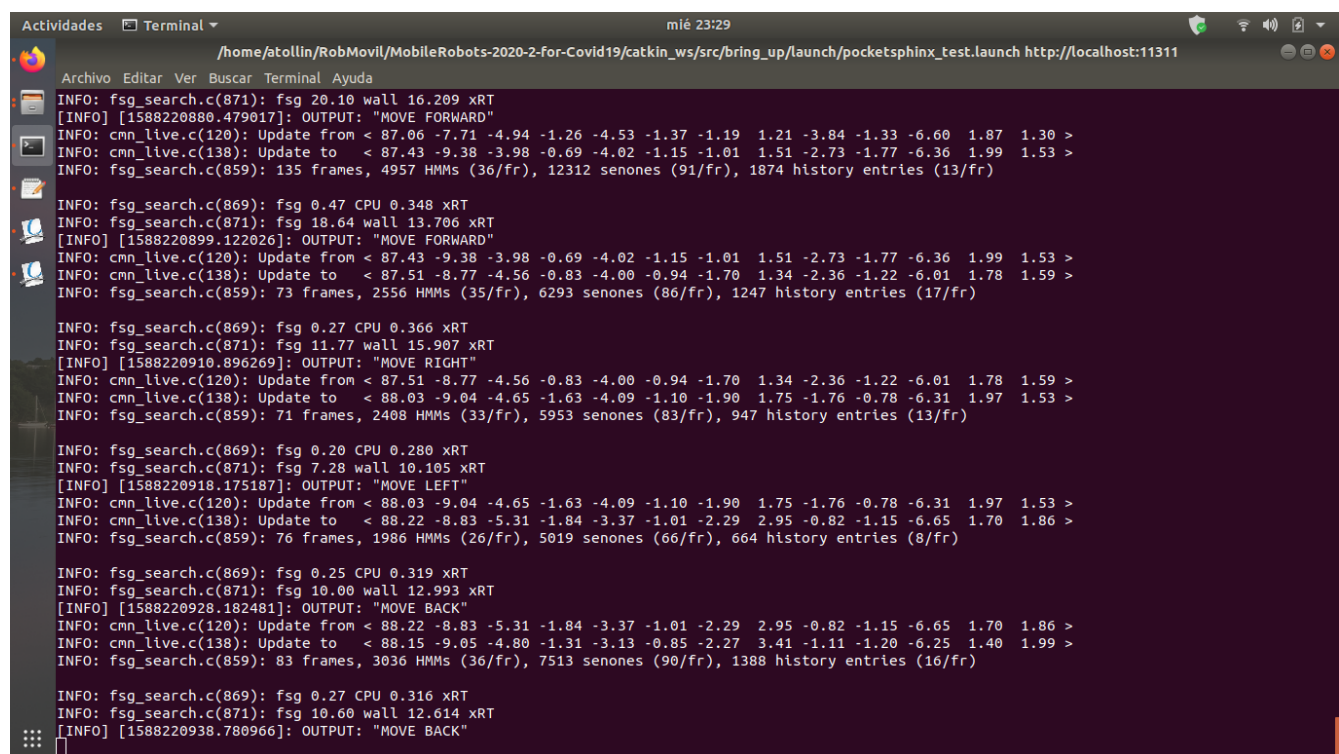
Parámetros que se modificaron

El parámetro “gram” modifica las reglas de gramática es decir cómo se forman las oraciones que puede reconocer.

“dict” modifica el diccionario dónde se define como es la pronunciación de cada palabra

grammar modifica de igual manera la gramática que rige el reconocimiento

rule es como se llamo la regla que sigue la gramática



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mié 23:29
/home/atollin/RobMovil/MobileRobots-2020-2-for-Covid19/catkin_ws/src/bring_up/launch/pocketsphinx_test.launch http://localhost:11311
Archivo Editar Ver Buscar Terminal Ayuda
INFO: fsg_search.c(871): fsg 20.10 wall 16.209 xRT
[INFO] [1588220880.479017]: OUTPUT: "MOVE FORWARD"
INFO: cmn_live.c(120): Update from < 87.06 -7.71 -4.94 -1.26 -4.53 -1.37 -1.19 1.21 -3.84 -1.33 -6.60 1.87 1.30 >
INFO: cmn_live.c(138): Update to < 87.43 -9.38 -3.98 -0.69 -4.02 -1.15 -1.01 1.51 -2.73 -1.77 -6.36 1.99 1.53 >
INFO: fsg_search.c(859): 135 frames, 4957 HMMs (36/fr), 12312 senones (91/fr), 1874 history entries (13/fr)

INFO: fsg_search.c(869): fsg 0.47 CPU 0.348 xRT
INFO: fsg_search.c(871): fsg 18.64 wall 13.706 xRT
[INFO] [1588220899.122026]: OUTPUT: "MOVE FORWARD"
INFO: cmn_live.c(120): Update from < 87.43 -9.38 -3.98 -0.69 -4.02 -1.15 -1.01 1.51 -2.73 -1.77 -6.36 1.99 1.53 >
INFO: cmn_live.c(138): Update to < 87.51 -8.77 -4.56 -0.83 -4.00 -0.94 -1.70 1.34 -2.36 -1.22 -6.01 1.78 1.59 >
INFO: fsg_search.c(859): 73 frames, 2556 HMMs (35/fr), 6293 senones (86/fr), 1247 history entries (17/fr)

INFO: fsg_search.c(869): fsg 0.27 CPU 0.366 xRT
INFO: fsg_search.c(871): fsg 11.77 wall 15.907 xRT
[INFO] [1588220910.896269]: OUTPUT: "MOVE RIGHT"
INFO: cmn_live.c(120): Update from < 87.51 -8.77 -4.56 -0.83 -4.00 -0.94 -1.70 1.34 -2.36 -1.22 -6.01 1.78 1.59 >
INFO: cmn_live.c(138): Update to < 88.03 -9.04 -4.65 -1.63 -4.09 -1.10 -1.90 1.75 -1.76 -0.78 -6.31 1.97 1.53 >
INFO: fsg_search.c(859): 71 frames, 2408 HMMs (33/fr), 5953 senones (83/fr), 947 history entries (13/fr)

INFO: fsg_search.c(869): fsg 0.20 CPU 0.280 xRT
INFO: fsg_search.c(871): fsg 7.28 wall 10.105 xRT
[INFO] [1588220918.175187]: OUTPUT: "MOVE LEFT"
INFO: cmn_live.c(120): Update from < 88.03 -9.04 -4.65 -1.63 -4.09 -1.10 -1.90 1.75 -1.76 -0.78 -6.31 1.97 1.53 >
INFO: cmn_live.c(138): Update to < 88.22 -8.83 -5.31 -1.84 -3.37 -1.01 -2.29 2.95 -0.82 -1.15 -6.65 1.70 1.86 >
INFO: fsg_search.c(859): 76 frames, 1986 HMMs (26/fr), 5019 senones (66/fr), 664 history entries (8/fr)

INFO: fsg_search.c(869): fsg 0.25 CPU 0.319 xRT
INFO: fsg_search.c(871): fsg 10.00 wall 12.093 xRT
[INFO] [1588220928.182481]: OUTPUT: "MOVE BACK"
INFO: cmn_live.c(120): Update from < 88.22 -8.83 -5.31 -1.84 -3.37 -1.01 -2.29 2.95 -0.82 -1.15 -6.65 1.70 1.86 >
INFO: cmn_live.c(138): Update to < 88.15 -9.05 -4.80 -1.31 -3.13 -0.85 -2.27 3.41 -1.11 -1.20 -6.25 1.40 1.99 >
INFO: fsg_search.c(859): 83 frames, 3036 HMMs (36/fr), 7513 senones (90/fr), 1388 history entries (16/fr)

INFO: fsg_search.c(869): fsg 0.27 CPU 0.316 xRT
INFO: fsg_search.c(871): fsg 10.60 wall 12.614 xRT
[INFO] [1588220938.780966]: OUTPUT: "MOVE BACK"
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mié 23:30
/home/atollin/RobMovil/MobileRobots-2020-2-for-Covid19/catkin_ws/src/bring_up/launch/pocketsphinx_test.launch http://localhost:11311
Archivo Editar Ver Buscar Terminal Ayuda
INFO: fsg_search.c(859): 156 frames, 5814 HMMs (37/fr), 14145 senones (90/fr), 2110 history entries (13/fr)
INFO: fsg_search.c(869): fsg 0.25 CPU 0.160 xRT
INFO: fsg_search.c(871): fsg 4.42 wall 2.814 xRT
[INFO] [1588220975.207268]: OUTPUT: "MOVE BACK HALF SPEED"
INFO: cmn_live.c(88): Update from < 89.51 -10.48 -3.31 -0.49 -3.59 -0.17 -0.32 2.76 -2.89 -0.13 -4.54 0.50 0.68 >
INFO: cmn_live.c(105): Update to < 89.91 -11.03 -4.18 -1.61 -3.21 0.26 -0.45 3.06 -2.44 0.75 -4.97 0.30 1.01 >
INFO: cmn_live.c(120): Update from < 89.91 -11.03 -4.18 -1.61 -3.21 0.26 -0.45 3.06 -2.44 0.75 -4.97 0.30 1.01 >
INFO: cmn_live.c(138): Update to < 89.53 -9.77 -3.54 -0.74 -3.53 0.59 -0.16 2.52 -2.50 1.24 -5.49 0.64 1.31 >
INFO: fsg_search.c(859): 166 frames, 2436 HMMs (14/fr), 7372 senones (44/fr), 782 history entries (4/fr)
INFO: fsg_search.c(869): fsg 0.36 CPU 0.214 xRT
INFO: fsg_search.c(871): fsg 11.50 wall 6.884 xRT
[INFO] [1588220986.706350]: OUTPUT: "MOVE BACK HALF SPEED"
INFO: cmn_live.c(120): Update from < 89.53 -9.77 -3.54 -0.74 -3.53 0.59 -0.16 2.52 -2.50 1.24 -5.49 0.64 1.31 >
INFO: cmn_live.c(138): Update to < 89.83 -10.20 -3.78 -1.25 -3.54 1.29 -1.01 2.65 -2.81 1.22 -5.24 0.17 1.27 >
INFO: fsg_search.c(859): 166 frames, 2649 HMMs (15/fr), 7957 senones (47/fr), 911 history entries (5/fr)
INFO: fsg_search.c(869): fsg 0.36 CPU 0.214 xRT
INFO: fsg_search.c(871): fsg 10.96 wall 6.564 xRT
[INFO] [1588220997.671475]: OUTPUT: "MOVE LEFT HALF SPEED"
INFO: cmn_live.c(88): Update from < 89.83 -10.20 -3.78 -1.25 -3.54 1.29 -1.01 2.65 -2.81 1.22 -5.24 0.17 1.27 >
INFO: cmn_live.c(105): Update to < 90.22 -9.91 -4.26 -1.48 -3.45 1.19 -1.29 2.57 -2.95 1.09 -5.02 0.63 1.32 >
INFO: cmn_live.c(120): Update from < 90.22 -9.91 -4.26 -1.48 -3.45 1.19 -1.29 2.57 -2.95 1.09 -5.02 0.63 1.32 >
INFO: cmn_live.c(138): Update to < 89.91 -10.03 -3.62 -1.33 -3.95 1.35 -1.01 2.31 -2.69 0.78 -4.77 0.79 1.18 >
INFO: fsg_search.c(859): 171 frames, 5303 HMMs (31/fr), 13594 senones (79/fr), 1978 history entries (11/fr)
INFO: fsg_search.c(869): fsg 0.48 CPU 0.277 xRT
INFO: fsg_search.c(871): fsg 16.46 wall 9.570 xRT
[INFO] [1588221014.134803]: OUTPUT: "MOVE FORWARD FULL SPEED"
INFO: cmn_live.c(120): Update from < 89.91 -10.03 -3.62 -1.33 -3.95 1.35 -1.01 2.31 -2.69 0.78 -4.77 0.79 1.18 >
INFO: cmn_live.c(138): Update to < 90.25 -10.12 -3.68 -1.05 -4.16 1.21 -1.60 2.11 -2.52 -0.20 -4.39 0.29 0.76 >
INFO: fsg_search.c(859): 146 frames, 3473 HMMs (23/fr), 9110 senones (62/fr), 1087 history entries (7/fr)
INFO: fsg_search.c(869): fsg 0.38 CPU 0.262 xRT
INFO: fsg_search.c(871): fsg 12.73 wall 8.657 xRT
[INFO] [1588221026.863285]: OUTPUT: "MOVE RIGHT FULL SPEED"
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catkin_ws/src/pocketsphinx/vocab/voice_cmds.txt
* pocketsphinx_test.launch
Guardar
<launch>
  <node name="speech_recog" pkg="pocketsphinx" type="asr_test.py"
    output="screen">
    <remap from="jsrf_audio" to="sphinx_audio" />
    <param name="gram" value="$(find pocketsphinx)/vocab/restaurant"/>
    <param name="dict" value="$(find pocketsphinx)/vocab/restaurant.dict"/>
    <param name="grammar" value="restaurant"/>
    <param name="rule" value="command"/>
    <param name="lm" value="default"/>
    <param name="hmm" value="default"/>
  </node>
  <node name="audio_control" pkg="pocketsphinx" type="send_audio.py"
    output="screen">
    <param name="input" value=":default"/>
  </node>
</launch>
```

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mié 23:38
/home/atollin/RobMovil/MobileRobots-2020-2-for-Covid19/catkin_ws/src/bring_up/launch/pocketsphinx_test.launch http://localhost:11311
Archivo Editar Ver Buscar Terminal Ayuda
INFO: fsg_search.c(869): fsg 0.46 CPU 0.347 xRT
INFO: fsg_search.c(871): fsg 19.64 wall 14.994 xRT
[INFO] [1588221250.192217]: OUTPUT: "JUSTINA YES"
INFO: cmn_live.c(120): Update from < 86.52 -6.89 -3.77 -0.51 -3.90 -0.84 0.26 2.50 1.07 1.07 -4.96 0.79 0.32 >
INFO: cmn_live.c(138): Update to < 87.18 -7.10 -3.77 -0.37 -4.23 -1.27 -0.69 1.72 -0.04 0.59 -5.18 1.39 1.28 >
INFO: fsg_search.c(859): 126 frames, 5628 HMMs (44/fr), 14477 senones (114/fr), 1159 history entries (9/fr)
INFO: fsg_search.c(869): fsg 0.34 CPU 0.270 xRT
INFO: fsg_search.c(871): fsg 12.28 wall 9.667 xRT
[INFO] [1588221262.472442]: OUTPUT: "JUSTINA WAIT"
INFO: cmn_live.c(88): Update from < 87.18 -7.10 -3.77 -0.37 -4.23 -1.27 -0.69 1.72 -0.04 0.59 -5.18 1.39 1.28 >
INFO: cmn_live.c(105): Update to < 87.95 -7.83 -4.09 -1.33 -3.71 -1.00 -1.44 1.39 0.06 0.41 -5.64 0.89 1.31 >
INFO: cmn_live.c(120): Update from < 87.95 -7.83 -4.09 -1.33 -3.71 -1.00 -1.44 1.39 0.06 0.41 -5.64 0.89 1.31 >
INFO: cmn_live.c(138): Update to < 87.94 -7.81 -4.05 -1.32 -3.65 -0.96 -1.39 1.41 0.07 0.39 -5.65 0.89 1.28 >
INFO: fsg_search.c(859): 139 frames, 15027 HMMs (108/fr), 32847 senones (236/fr), 2846 history entries (20/fr)
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mié 23:39
/home/atollin/RobMovil/MobileRobots-2020-2-for-Covid19/catkin_ws/src/bring_up/launch/pocketsphinx_test.launch http://localhost:11311

INFO: fsg_search.c(859): 148 frames, 13553 HMMs (91/fr), 27544 senones (186/fr), 2848 history entries (19/fr)

INFO: fsg_search.c(869): fsg 0.40 CPU 0.267 xRT
INFO: fsg_search.c(871): fsg 11.09 wall 7.444 xRT
[INFO] [1588221469.568950]: OUTPUT: "I WANT A TEA"
INFO: cmn_live.c(120): Update from < 92.43 -6.50 -7.61 -3.38 -3.75 -0.25 -4.66 -1.46 -1.66 -0.55 -5.45 0.43 -0.53 >
INFO: cmn_live.c(138): Update to < 92.93 -6.62 -8.81 -3.40 -3.17 -0.43 -5.51 -1.10 -1.34 -1.11 -6.31 0.32 -0.54 >
INFO: fsg_search.c(859): 68 frames, 1487 HMMs (21/fr), 3639 senones (53/fr), 325 history entries (4/fr)

INFO: fsg_search.c(869): fsg 0.09 CPU 0.127 xRT
INFO: fsg_search.c(871): fsg 0.99 wall 1.438 xRT
ERROR: "fsg_search.c", line 940: Final result does not match the grammar in frame 68
INFO: cmn_live.c(88): Update from < 92.93 -6.62 -8.81 -3.40 -3.17 -0.43 -5.51 -1.10 -1.34 -1.11 -6.31 0.32 -0.54 >
INFO: cmn_live.c(105): Update to < 92.82 -6.89 -8.68 -3.76 -2.97 -0.67 -4.93 -0.75 -1.85 -1.41 -6.35 0.18 -0.98 >
INFO: cmn_live.c(120): Update from < 92.82 -6.89 -8.68 -3.76 -2.97 -0.67 -4.93 -0.75 -1.85 -1.41 -6.35 0.18 -0.98 >
INFO: cmn_live.c(138): Update to < 92.57 -6.70 -8.30 -3.70 -2.74 -0.81 -4.76 -0.73 -1.95 -1.49 -6.33 0.23 -0.90 >
INFO: fsg_search.c(859): 127 frames, 9926 HMMs (78/fr), 22780 senones (179/fr), 2041 history entries (16/fr)

INFO: fsg_search.c(869): fsg 0.38 CPU 0.293 xRT
INFO: fsg_search.c(871): fsg 11.38 wall 8.888 xRT
ERROR: "fsg_search.c", line 940: Final result does not match the grammar in frame 127
INFO: cmn_live.c(120): Update from < 92.57 -6.70 -8.30 -3.70 -2.74 -0.81 -4.76 -0.73 -1.95 -1.49 -6.33 0.23 -0.90 >
INFO: cmn_live.c(138): Update to < 91.94 -7.00 -7.22 -4.26 -2.79 -0.23 -4.20 -0.19 -2.36 -0.71 -5.52 -0.52 -0.47 >
INFO: fsg_search.c(859): 216 frames, 19764 HMMs (91/fr), 42808 senones (198/fr), 3532 history entries (16/fr)

INFO: fsg_search.c(869): fsg 0.53 CPU 0.245 xRT
INFO: fsg_search.c(871): fsg 13.14 wall 6.053 xRT
[INFO] [1588221495.076739]: OUTPUT: "I WANT COOKIES AND CHIPS"
INFO: cmn_live.c(88): Update from < 91.94 -7.00 -7.22 -4.26 -2.79 -0.23 -4.20 -0.19 -2.36 -0.71 -5.52 -0.52 -0.47 >
INFO: cmn_live.c(105): Update to < 91.49 -6.54 -7.02 -4.15 -2.51 -0.29 -4.02 0.11 -2.06 -0.37 -5.47 -0.62 -0.22 >
INFO: cmn_live.c(120): Update from < 91.49 -6.54 -7.02 -4.15 -2.51 -0.29 -4.02 0.11 -2.06 -0.37 -5.47 -0.62 -0.22 >
INFO: cmn_live.c(138): Update to < 91.48 -6.53 -7.00 -4.17 -2.52 -0.30 -4.03 0.13 -2.04 -0.37 -5.48 -0.63 -0.22 >
INFO: fsg_search.c(859): 67 frames, 2112 HMMs (31/fr), 5195 senones (77/fr), 468 history entries (6/fr)

INFO: fsg_search.c(869): fsg 0.34 CPU 0.493 xRT
INFO: fsg_search.c(871): fsg 16.14 wall 23.741 xRT
ERROR: "fsg_search.c", line 940: Final result does not match the grammar in frame 67
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mié 23:38
/home/atollin/RobMovil/MobileRobots-2020-2-for-Covid19/catkin_ws/src/bring_up/launch/pocketsphinx_test.launch http://localhost:11311

INFO: fsg_search.c(869): fsg 0.61 CPU 0.374 xRT
INFO: fsg_search.c(871): fsg 22.20 wall 13.539 xRT
[INFO] [1588221306.506148]: OUTPUT: "I WANT A BEER"
INFO: cmn_live.c(120): Update from < 90.67 -7.94 -5.92 -2.03 -2.28 -2.33 -5.88 -0.87 -0.34 -0.98 -5.02 0.04 -0.80 >
INFO: cmn_live.c(138): Update to < 90.22 -8.09 -5.71 -2.27 -2.38 -1.64 -5.07 -0.40 -0.09 -0.96 -4.80 0.64 0.20 >
INFO: fsg_search.c(859): 174 frames, 18218 HMMs (104/fr), 34397 senones (197/fr), 3533 history entries (20/fr)

INFO: fsg_search.c(869): fsg 0.58 CPU 0.331 xRT
INFO: fsg_search.c(871): fsg 19.85 wall 11.343 xRT
[INFO] [1588221326.359233]: OUTPUT: "I WANT TUNA FISH AND ROBO O'S"
INFO: cmn_live.c(88): Update from < 90.22 -8.09 -5.71 -2.27 -2.38 -1.64 -5.07 -0.40 -0.09 -0.96 -4.80 0.64 0.20 >
INFO: cmn_live.c(105): Update to < 90.24 -8.07 -5.63 -2.24 -2.41 -1.67 -5.07 -0.41 -0.16 -1.01 -4.84 0.64 0.18 >
INFO: cmn_live.c(120): Update from < 90.24 -8.07 -5.63 -2.24 -2.41 -1.67 -5.07 -0.41 -0.16 -1.01 -4.84 0.64 0.18 >
INFO: cmn_live.c(138): Update to < 91.13 -6.73 -5.33 -1.87 -3.25 -2.65 -6.84 -2.64 -1.46 -1.04 -4.88 0.60 0.49 >
INFO: fsg_search.c(859): 128 frames, 6853 HMMs (53/fr), 15531 senones (121/fr), 1358 history entries (10/fr)

INFO: fsg_search.c(869): fsg 0.81 CPU 0.626 xRT
INFO: fsg_search.c(871): fsg 38.43 wall 29.792 xRT
ERROR: "fsg_search.c", line 940: Final result does not match the grammar in frame 128
INFO: cmn_live.c(88): Update from < 91.13 -6.73 -5.33 -1.87 -3.25 -2.65 -6.84 -2.64 -1.46 -1.04 -4.88 0.60 0.49 >
INFO: cmn_live.c(105): Update to < 92.03 -7.27 -5.81 -2.20 -3.33 -2.62 -7.11 -1.79 -2.15 -1.21 -5.82 0.26 -0.57 >
INFO: cmn_live.c(120): Update from < 92.03 -7.27 -5.81 -2.20 -3.33 -2.62 -7.11 -1.79 -2.15 -1.21 -5.82 0.26 -0.57 >
INFO: cmn_live.c(138): Update to < 91.44 -6.16 -5.01 -1.73 -3.87 -2.12 -6.63 -1.65 -1.90 -1.32 -6.07 0.23 -0.69 >
INFO: fsg_search.c(859): 250 frames, 19407 HMMs (77/fr), 40715 senones (162/fr), 3437 history entries (13/fr)

INFO: fsg_search.c(869): fsg 0.66 CPU 0.263 xRT
INFO: fsg_search.c(871): fsg 18.41 wall 7.336 xRT
[INFO] [1588221383.207153]: OUTPUT: "I WANT PICKLES AND TUNA FISH"
INFO: cmn_live.c(120): Update from < 91.44 -6.16 -5.01 -1.73 -3.87 -2.12 -6.63 -1.65 -1.90 -1.32 -6.07 0.23 -0.69 >
INFO: cmn_live.c(138): Update to < 91.89 -5.93 -6.37 -2.89 -4.48 -1.88 -6.32 -1.86 -1.78 -1.13 -5.97 -0.07 -0.96 >
INFO: fsg_search.c(859): 130 frames, 12213 HMMs (93/fr), 25428 senones (195/fr), 3322 history entries (25/fr)

INFO: fsg_search.c(869): fsg 0.67 CPU 0.515 xRT
INFO: fsg_search.c(871): fsg 30.61 wall 23.365 xRT
[INFO] [1588221413.818991]: OUTPUT: "I WANT A TEA"
INFO: cmn_live.c(88): Update from < 91.89 -5.93 -6.37 -2.89 -4.48 -1.88 -6.32 -1.86 -1.78 -1.13 -5.97 -0.07 -0.96 >
INFO: cmn_live.c(105): Update to < 92.28 -5.81 -7.44 -3.62 -4.75 -1.22 -5.73 -1.44 -1.95 -1.43 -5.79 -0.24 -1.10 >
```