

# 懶人とPythonとAnimation Studio

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# Changelog

- CSIE, NCU (2002-2006)
- GINM, NTU (2006-2008)
- Platoon Leader, Military Police (2008-2009)
- 潛逃出境(?) (2009-2010)
- RD, Digimax Inc. (2010-current)

# Spec

- 略懂Python
- 略懂OpenGL
- Computer Graphics
- Like to try special programming language.
- Cannot live wothout Changjie IM.
- AviSynth script geek.

# 章節

1. 工作就輸了！
2. 沒C++, 不會用Python嗎!?
3. 嫩人者人恆嫩之
4. 沒有正派, 沒有反派, 只有All Py

工作就輸了！

# 工作就輸了！



工作就輸了！



工作就輸了！



# 工作就輸了！

Video Game



3D Animation



Mobile App



どっち？

工作就輸了！



<https://www.youtube.com/watch?v=gBgcexFFl3E&hd=1>



沒C++,不會用Python嗎!?

# 沒C++,不會用Python嗎!?

- Touch Python in high school
- Then Java,Java,Java,..... and C++,C++,  
C++,.....,Prolog in college
- Modify excel everyday in army
- Escape to Japan
- Use Python again in Digimax Inc.

# 沒C++,不會用Python嗎!?



# 沒C++,不會用Python嗎!?



# 沒C++,不會用Python嗎!?

- Autodesk
- The Foundry
- Side Effects
- Blender Foundation

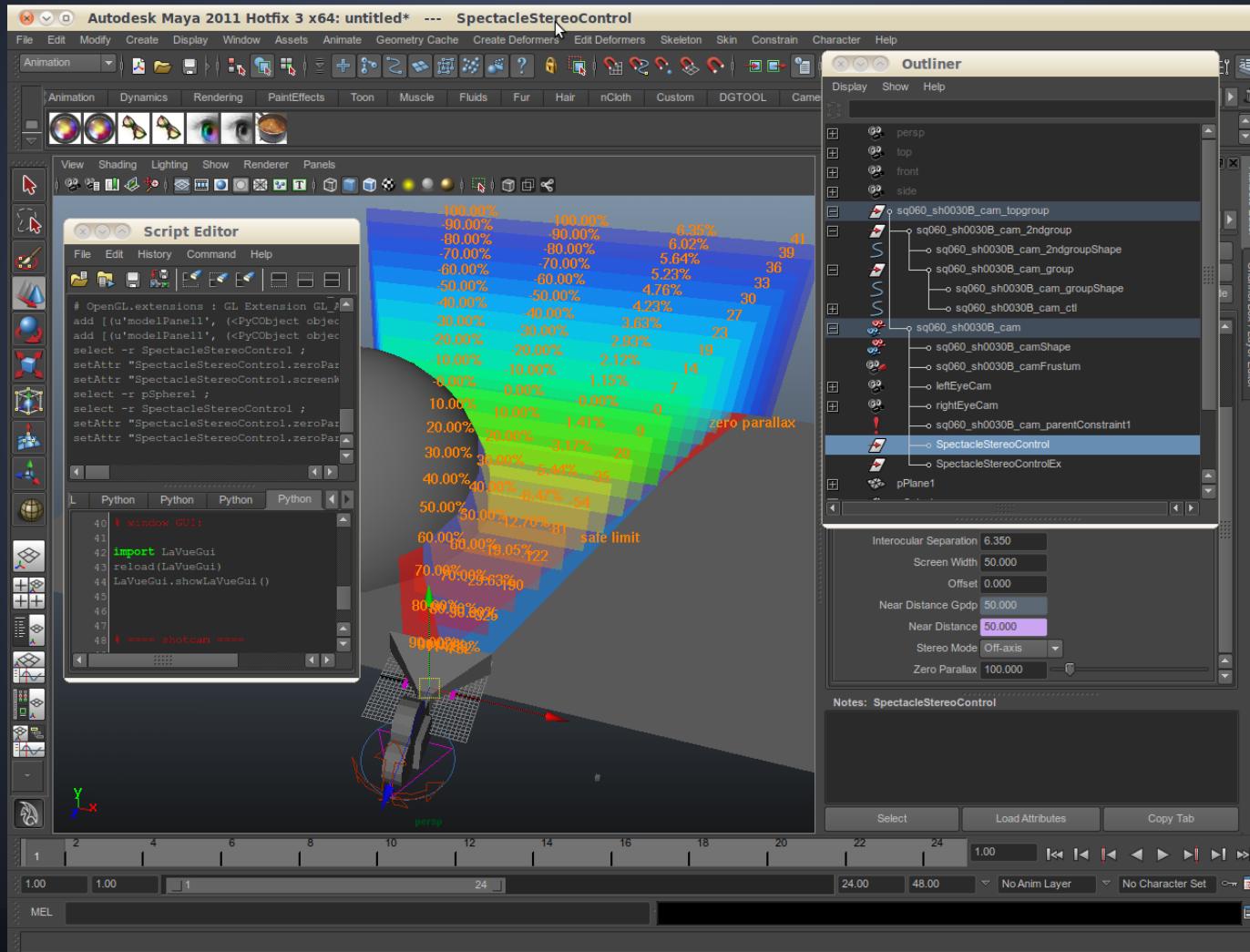


# 沒C++,不會用Python嗎!?

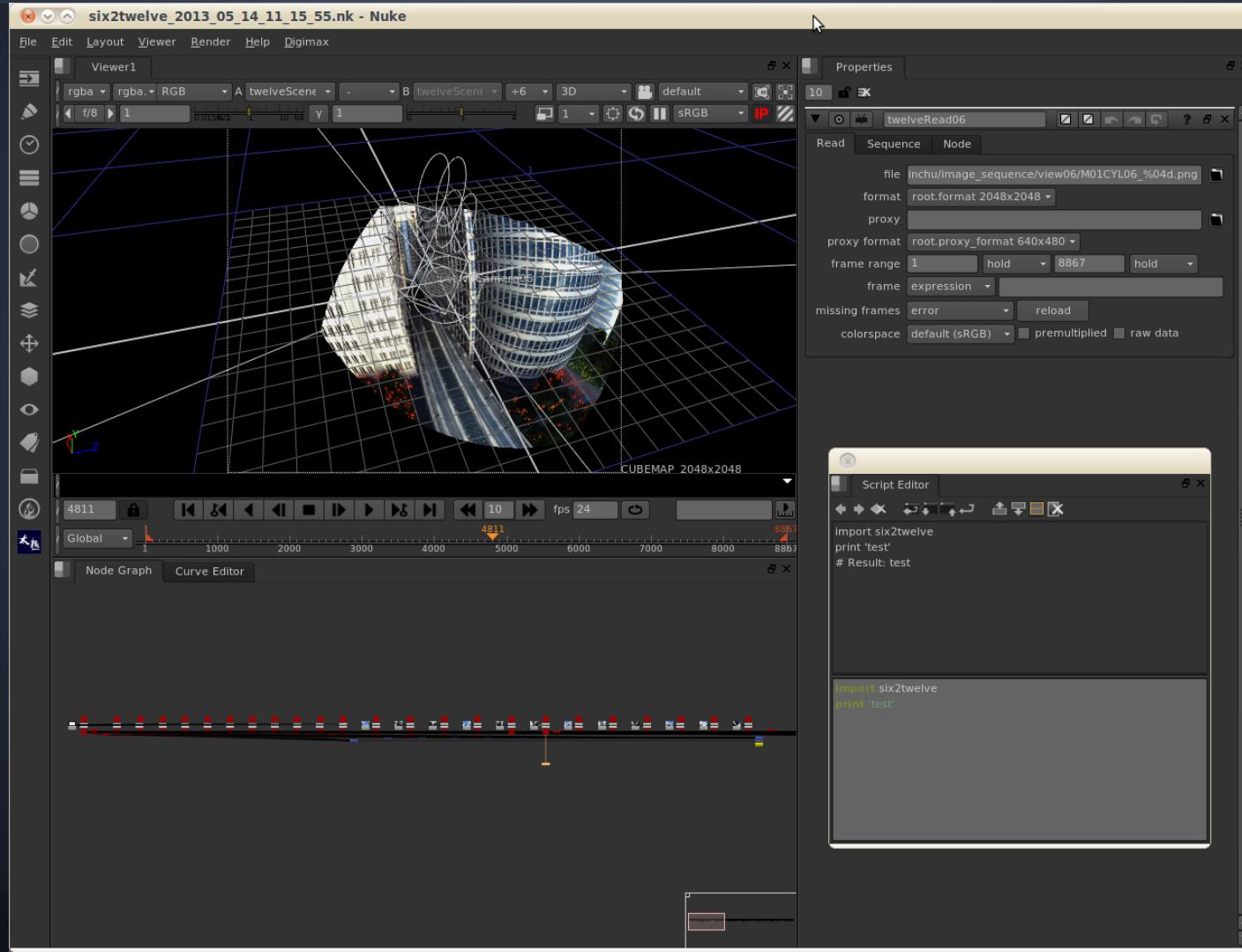
- Maya - MEL & Python
- Nuke - Python
- Houdini - HScript & Python
- Blender - Python



# 沒C++,不會用Python嗎!?



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# 沒C++,不會用Python嗎!?



# 沒C++,不會用Python嗎!?

Outside of commercial software?

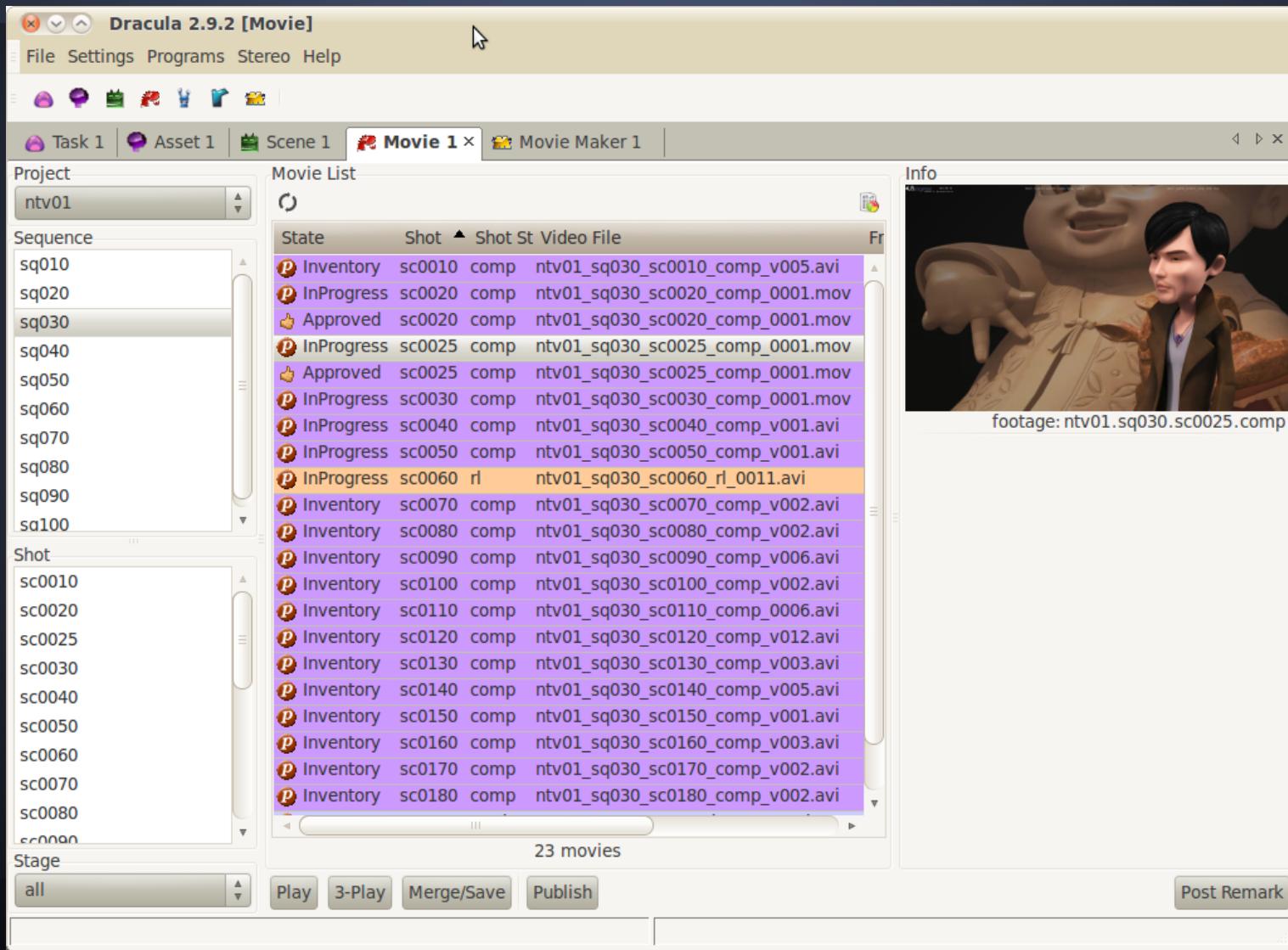
Python

- easy to be integrated with Maya, Nuke,...
- fast prototyping
- easy to read

Bash

- control command line tool
- wrapper

# 沒C++,不會用Python嗎!?



# 沒C++,不會用Python嗎!?

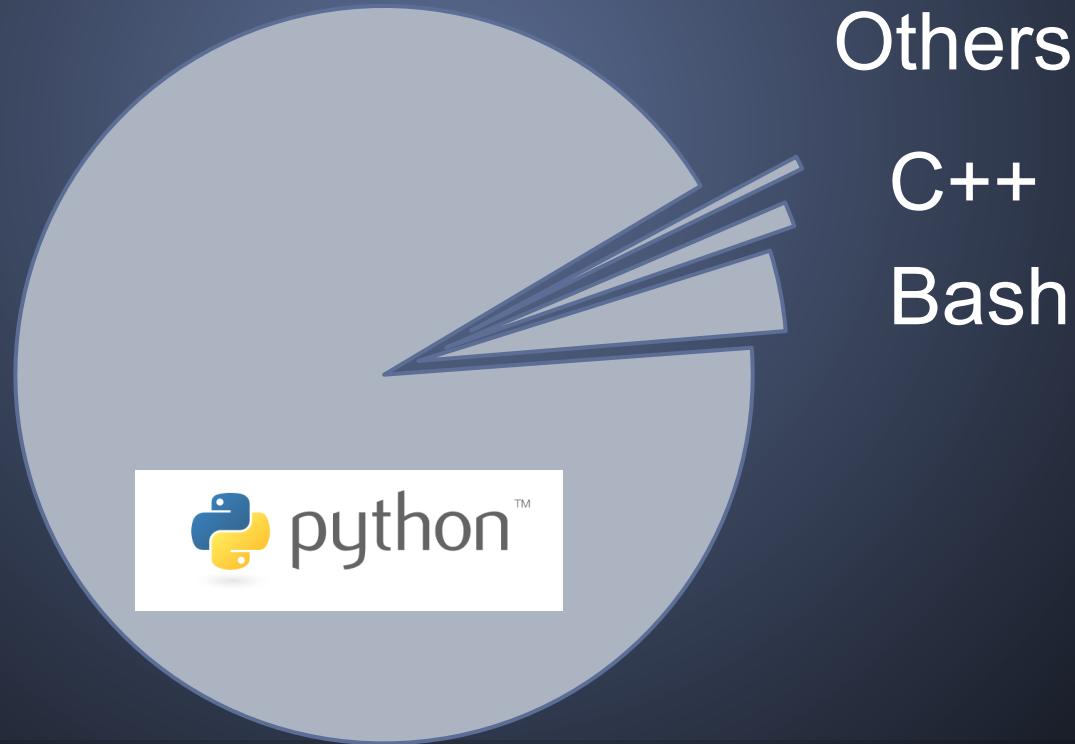


# 沒C++,不會用Python嗎!?



# 沒C++,不會用Python嗎!?

各項程式語言在digimax中的使用率



娘人者人恆娘之

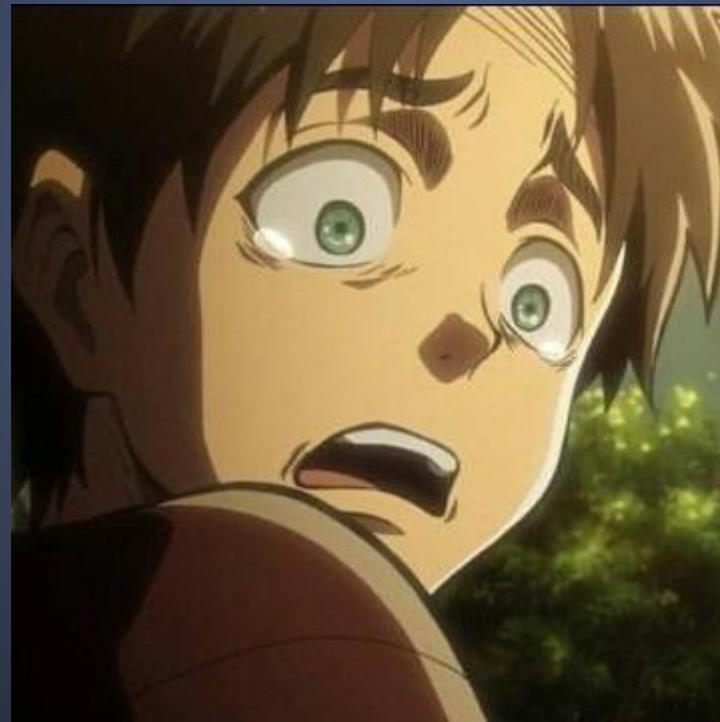
嫁人者人恆嫁之



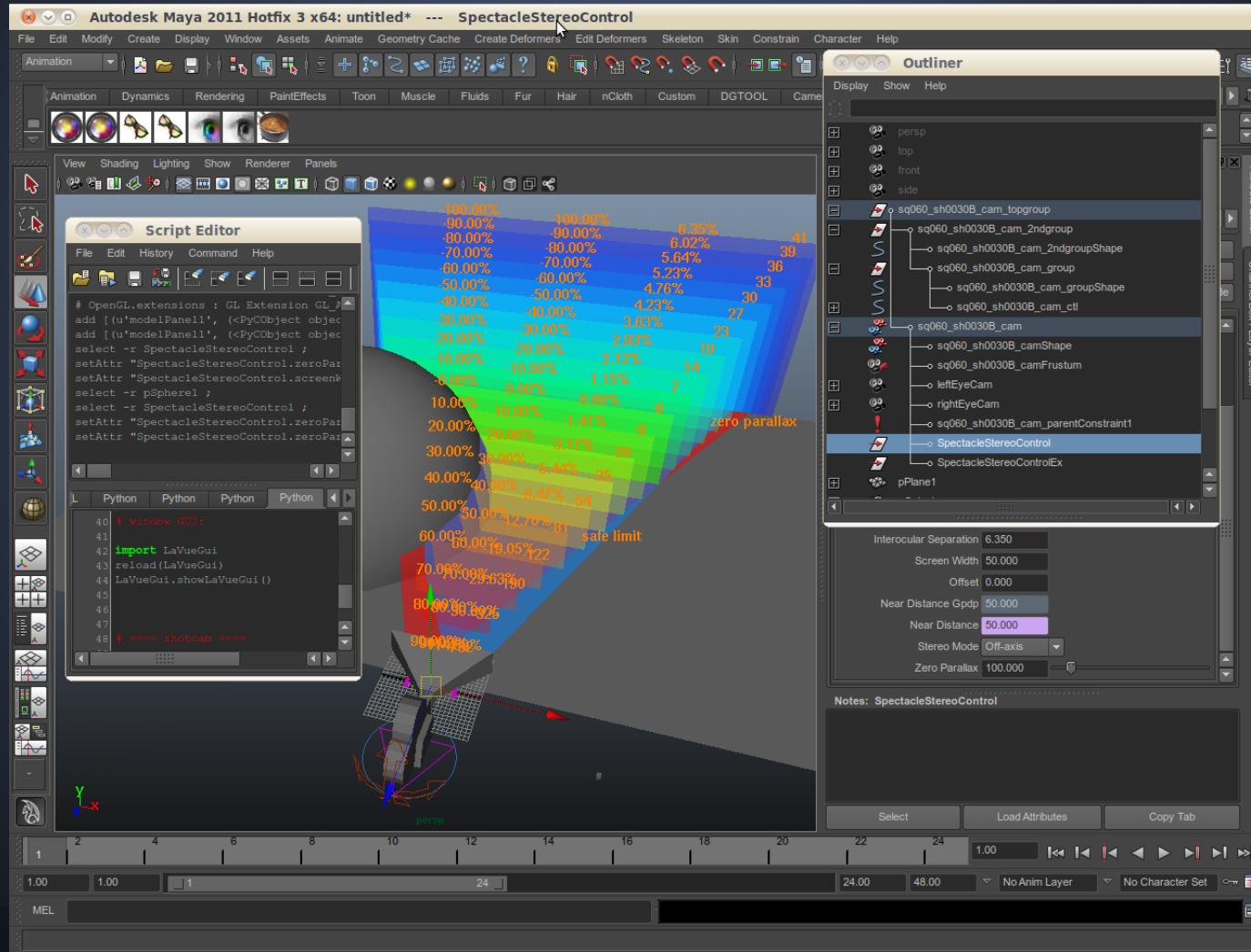
# 婊人者人恆婊之

9/9	
0800	Auton started
1000	stopped - auton ✓
1300 (033) MP-MC	$\begin{cases} 1.2700 & 9.037847025 \\ 2.130476415 & 9.037846995 \end{cases}$ correct 033 PRO 2 4.615925059 (-)
	correct 2.130476415
	Relys 6-2 in 033 failed special speed test in relay "11.00 test."
	<u>Relay changed</u>
1100	Started Cosine Tape (Sine check)
1525	Started Multi Adder Test.
1545	 Relay #70 Panel F (moth) in relay.
1600	Auton startd.
1700	closed down.
	First actual case of bug being found.

嬢人者人恒嬢之



# 婊人者人恆婊之



婊人者人恆婊之

"沒時間了,用直覺寫code!"

婊人者人恆婊之

```
>>> posX = mayaNode.positionX.get(),
```

```
...
```

```
...
```

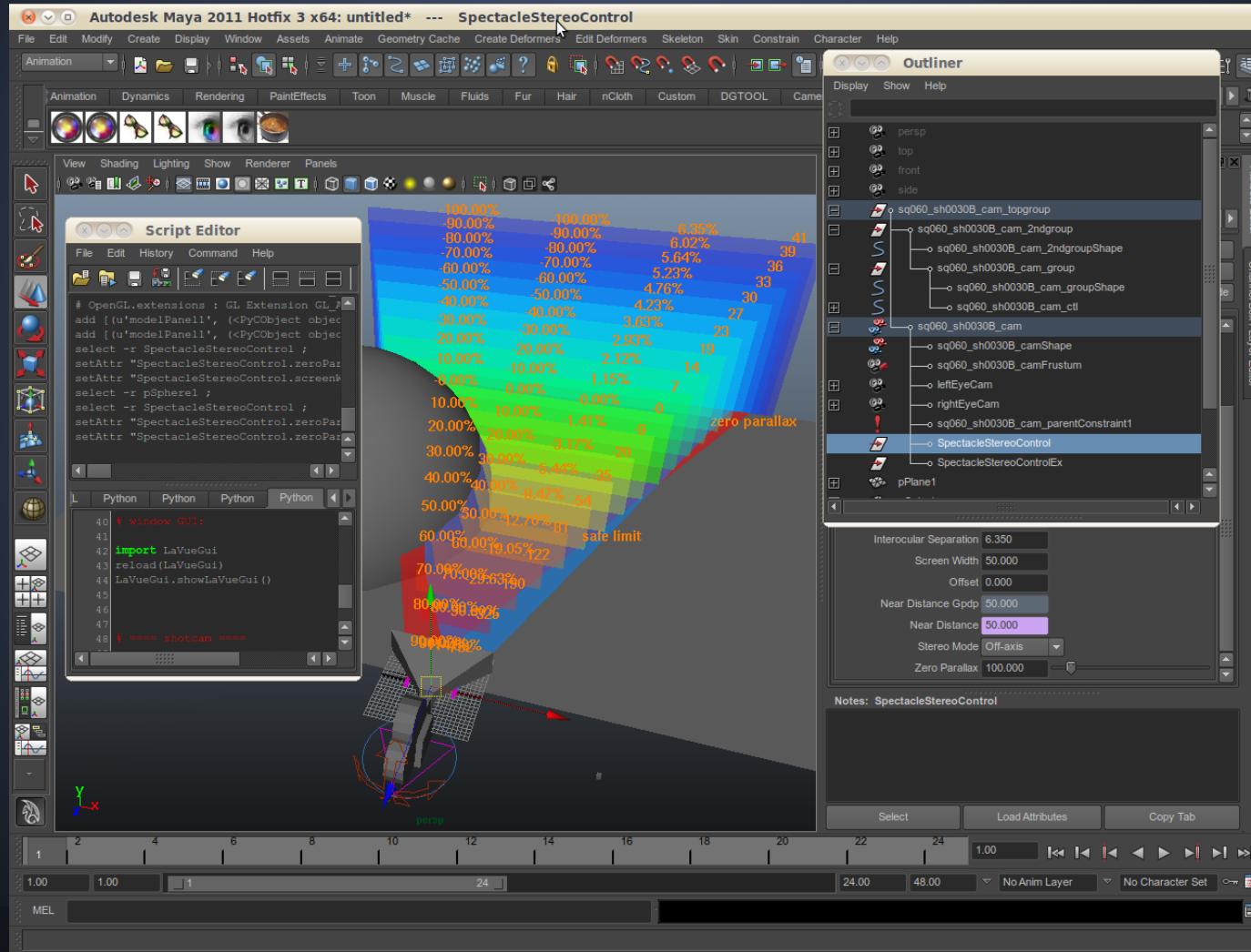
```
>>> print posX-10.0
```

```
TypeError: can only concatenate tuple (not "float") to tuple
```

嬪人者人恆嬪之

“ ”  
，

# 婊人者人恆婊之



婊人者人恆婊之

"好麻煩喔，每次更新工具都要重開Maya，重開Maya很花時間耶!"

"加個reload(module)，這樣就不用重開Maya了!"

婊人者人恆婊之

I am so smart!



嬪人者人恆嬪之

不久之後...

"為什麼想按按鈕重開輔助工具,就不能用了呢"

婊人者人恆婊之

```
>>> import mymodule  
  
>>> myinstance = mymodule.MyClass()  
>>> reload(mymodule)  
>>> isinstance(myinstance, mymodule.MyClass)  
False
```

婊人者人恆婊之

[無碼] '感人' [真相館].mov

"這個檔案怎麼不能用工具轉啊?"

婊人者人恆婊之

```
>>> os.system('ffmpeg -i %s %s' % (input, output))
```

```
-> ffmpeg -i [無碼] '感人' [真相館].mov result.mp4  
-> in: [無碼] out: 感人 [真相館].mov result.mp4
```

# 婊人者人恆婊之

```
>>> def escapeShellArg(string):
>>>     return " "+string.replace(" ", " \\\ ")+" "
>>> args = '.join(map(escapeShellArg, argv))
>>> os.system('ffmpeg -i '+args)
-> ffmpeg -i '[無碼]' \"感人\" [真相館].mov' 'result.mp4'
-> in: [無碼] '感人' [真相館].mov out: result.mp4
```

婊人者人恆婊之



嬪人者人恆嬪之

"你來看看，為什麼圖片會一直多出來啊？"

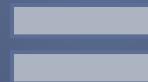
# 婊人者人恆婊之

```
>>> def fun(array=[]):  
>>>     array.append('new.png')  
>>>     print array
```

```
>>> fun()  
['new.jpg']  
>>> fun()  
['new.jpg', 'new.jpg']
```

婊人者人恆婊之

A workstation

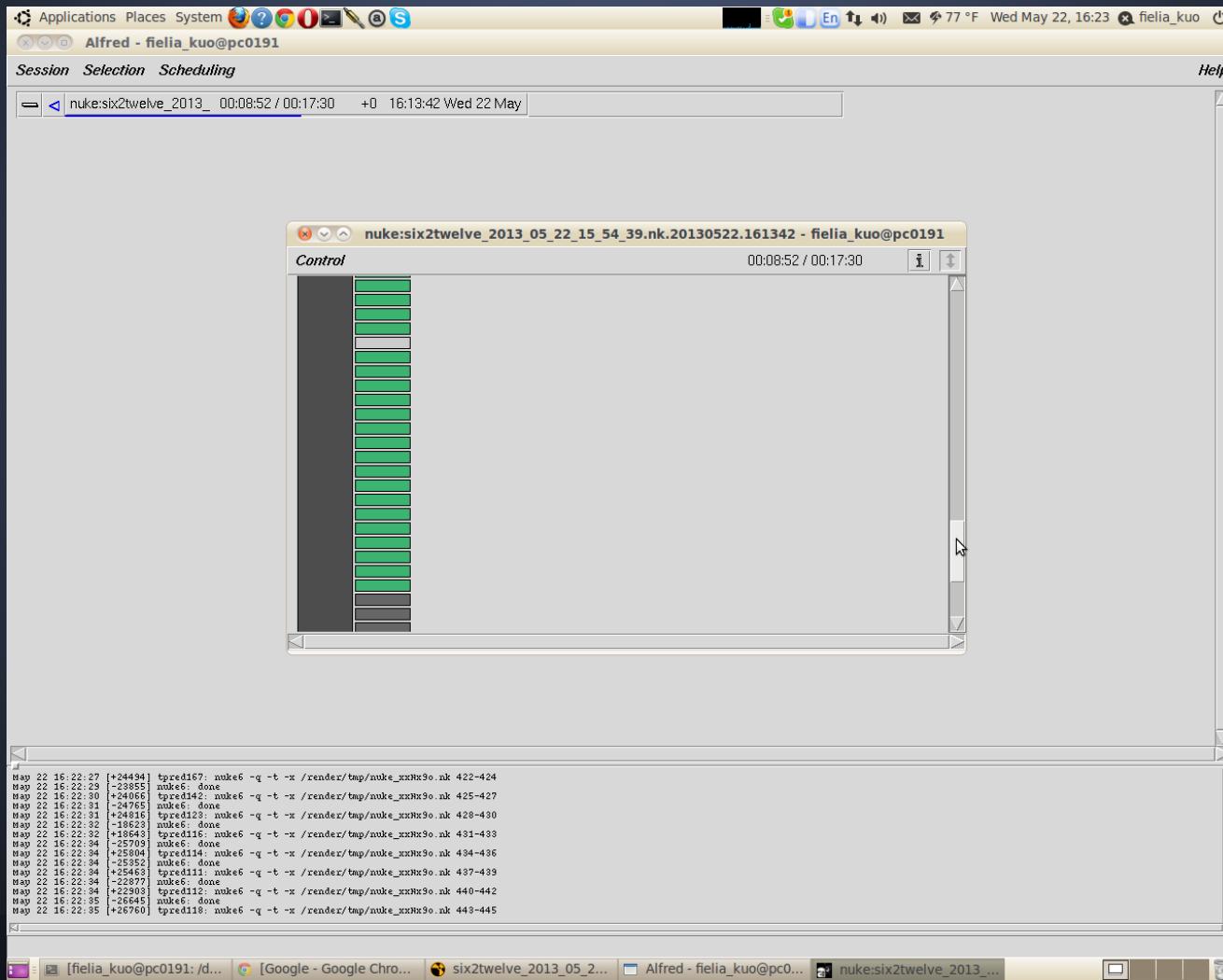


嫁人者人恆嫁之

## Render Farm



# 婊人者人恆婊之



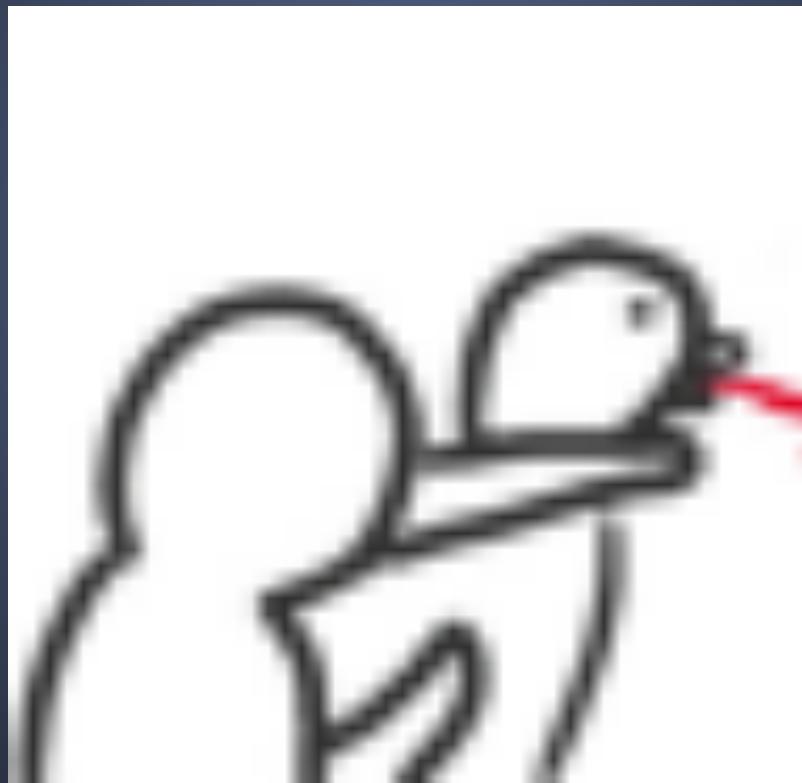
嬪人者人恆嬪之

"奇怪耶!? 算好的圖怎麼會掉格?"

# 婊人者人恆婊之

```
>>> def main(argv=sys.argv[:])  
...  
>>>     return 0 # don't return or always return 0  
  
>>> sys.exit(main())  
# とりあえず sys.exit(0), always run this
```

嬪人者人恆嬪之



# 婊人者人恆婊之

- Execute parallel rendering on render farm,  
sys.exit() is the keypoint
- render farm dispatcher see return code to  
check if a program is failed
- We should forward return code of program  
launched by wrapper

婊人者人恆婊之

However, these coding style is everywhere until today. Damn!

Solution: not exist

Reason: .....

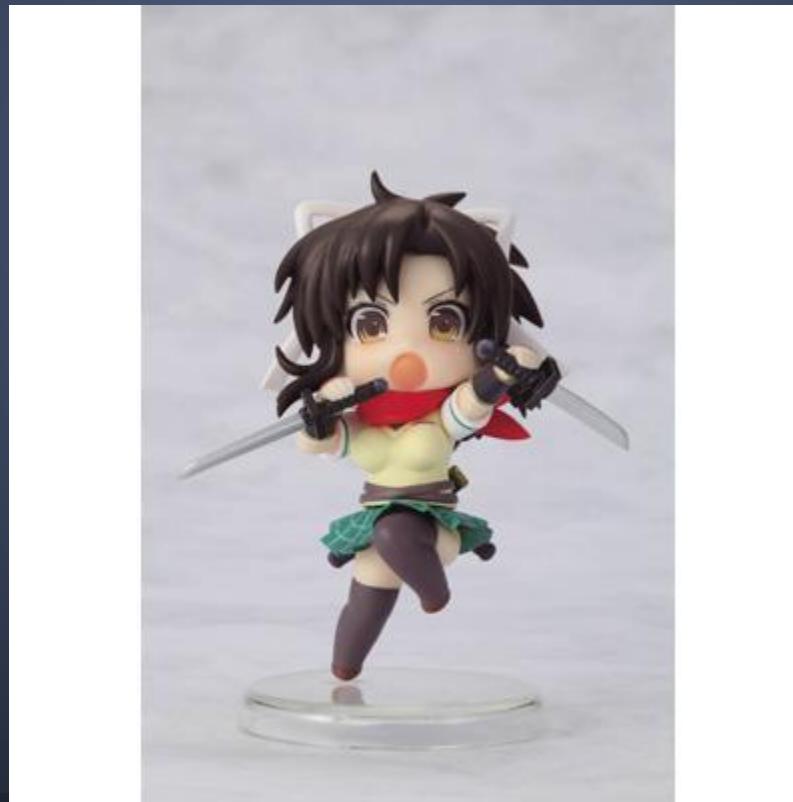
婊人者人恆婊之



沒有正派,沒有反派,只有All Py

# 沒有正派,沒有反派,只有All Py

不是歐派!別聽錯了!



# 沒有正派,沒有反派,只有All Py

We are not Python geek.

What we have, what we use.

Fast development is the top rule.

# Questions?

おわり!

\( '3' )/

