

# $\lambda$ Lounge

## **OpenGL in Common Lisp**

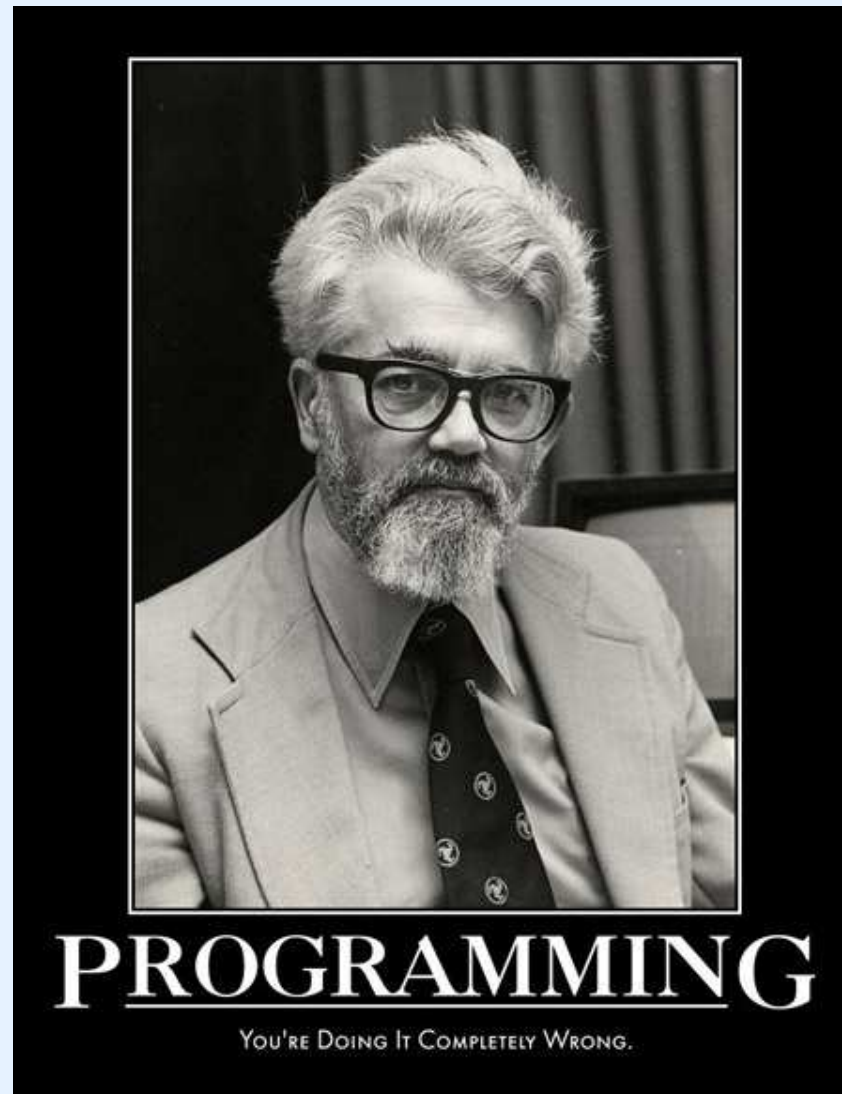
**Christopher Mark Gore**

<http://www.cgore.com>

[cgore@cgore.com](mailto:cgore@cgore.com)

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**Lisp is Cool!**



## 3D is Cool!



Except for 3D Pitfall, which looks really lame.

## Getting Started

### 1. Install Linux.

`http://aptosid.com`

### 2. Install SBCL and some libraries.

```
apt-get install sbcl{,-doc,-source} \  
cl-{asdf,cffi}
```

### 3. Install Emacs and SLIME *(Not strictly required.)*

```
apt-get install emacs,-goodies-el cl-swank \  
cl-swank slime common-lisp-controller
```

### 4. Install OpenGL.

```
apt-get install libgl1-mesa-dev \  
libglu1-mesa{,-dev} libglut3{,-dev} ...
```

## Extra Libraries

- $\Sigma$ , my library of random useful things in Common Lisp.  
<https://github.com/cgore/sigma>  
*(Almost completely undocumented.)*
- `cl-opengl`, or else we need to do a lot more work.  
<https://github.com/3b/cl-opengl>  
This library provides `cl-glu` and `cl-glut`.

## Getting Libraries via Quicklisp

Quicklisp is the least irritating way to get Common Lisp libraries. It is available at <http://www.quicklisp.org>.

- `curl -O http://beta.quicklisp.org/quicklisp.lisp`
- `sbcl --load quicklisp.lisp`
- `(quicklisp-quickstart:install)`
- `(ql:quickload "cl-opengl")`

Now we should have a working OpenGL in Common Lisp.

## Hello Cube

The simplest thing to do in 3D is a plain cube. This is a good test to see if the libraries and dependencies are all okay. Cf. `source/hello-cube.lisp`, `run (hello-cube)`.

**TODO ...**



***Questions?***