

## Testimonial 2

### Learned:

- I learned what I'm actually doing for my project!
- I have learned a general way of describing the Sierpinski Carpet and the Menger Sponge, and their differences. Using this I have also defined the 8 other representations of the Cantor Set, and my project now is to visualize all of the 2D, 3D, and 4D representations.
- I have figure out how to have templated classes in Syzygy.
- I have been learning and applying speed and memory optimizations on my program.
- I have also learned how ADSODA's lighting system works, and that it's not what I was hoping for at all...

### Done:

- ADSODA is working.
- adsoda.cantor successfully draws the Sierpinski Carpet, Sierpinski Dust in 2 and 3 dimensions, the rather boring cube-with-it's-center-recursively-removed and a Menger Sponge. Note, though, that without toggling outlines ('l') which slows down OpenGL a lot you won't be able to tell it's a Menger Sponge. I am still working on having lighting, as ADSODA's lighting scheme is a bit flawed.
- The program can generate and display the 7th recursion of the Sierpinski Carpet, (2,097,152 squares) but the framerate goes down to 3. So the program limits the recursion level of the carpet to 6. The recursion levels of the other solids have not yet been defined.
- I have all of the boolean equations I need to generate all of the 2D, 3D and 4D solids, and know what I'm doing going forward.