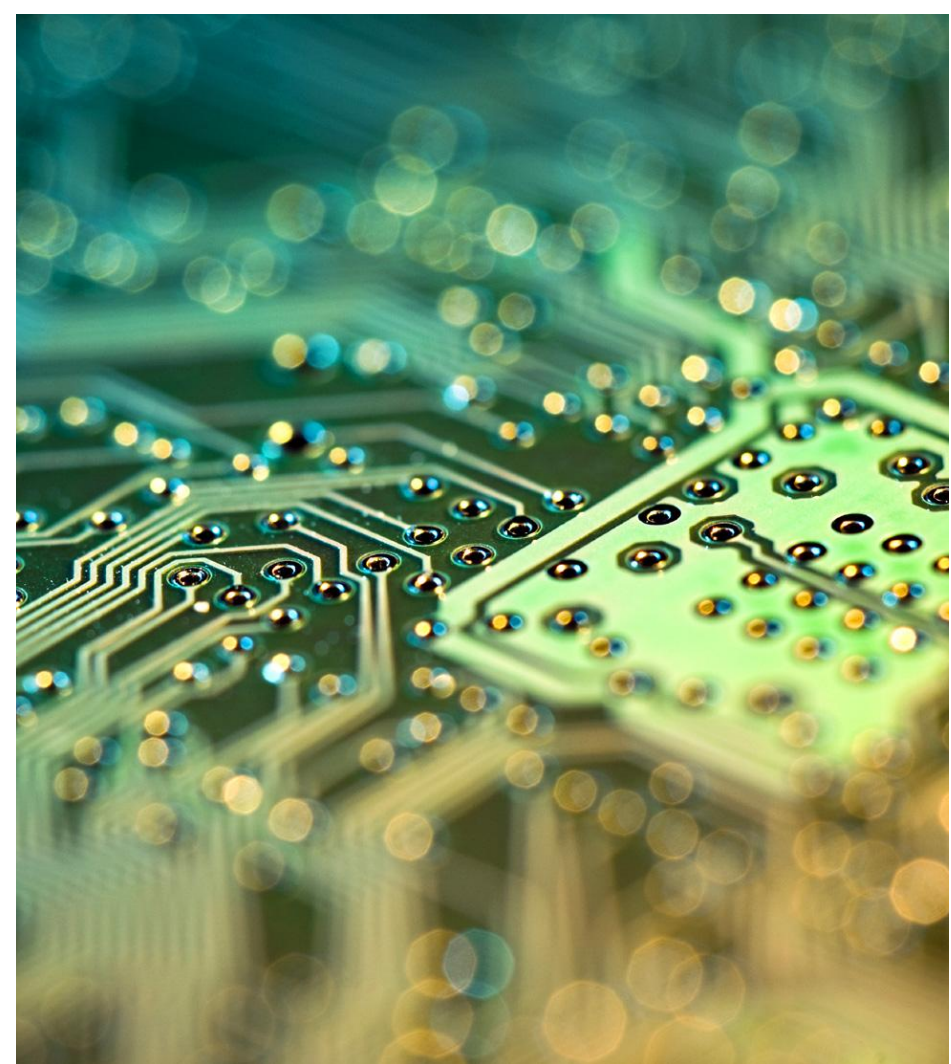


Special Topics

Discussion 12 • April 27, 2017



Some TAs like to use this time to talk about the powerful and far-reaching applications of computer science.

I had something a little different in mind.

```
45     }
46     return $sum;
47 }
48 }
49 # -----
50 # Returns a cross product of two vectors.
51 # Takes two pointers to arrays as input
52 # Returns a two-dimensional array.
sub xProduct {
    my ($x,$y) = @_;
    my $i, $j, @array;
    my $ct1 = $#{$x} + 1;    # items in $x
    my $ct2 = $#{$y} + 1;    # items in $y
    my $result = \@array;
    for ($i=0;$i<$ct1;$i++) {
        for ($j=0;$j<$ct2;$j++) {
            $$result[$i][$j] = $$x[$i] * $$y[$j];
            # print " $i, $j, $$result[$i][$j]\n";
        }
    }
}
```

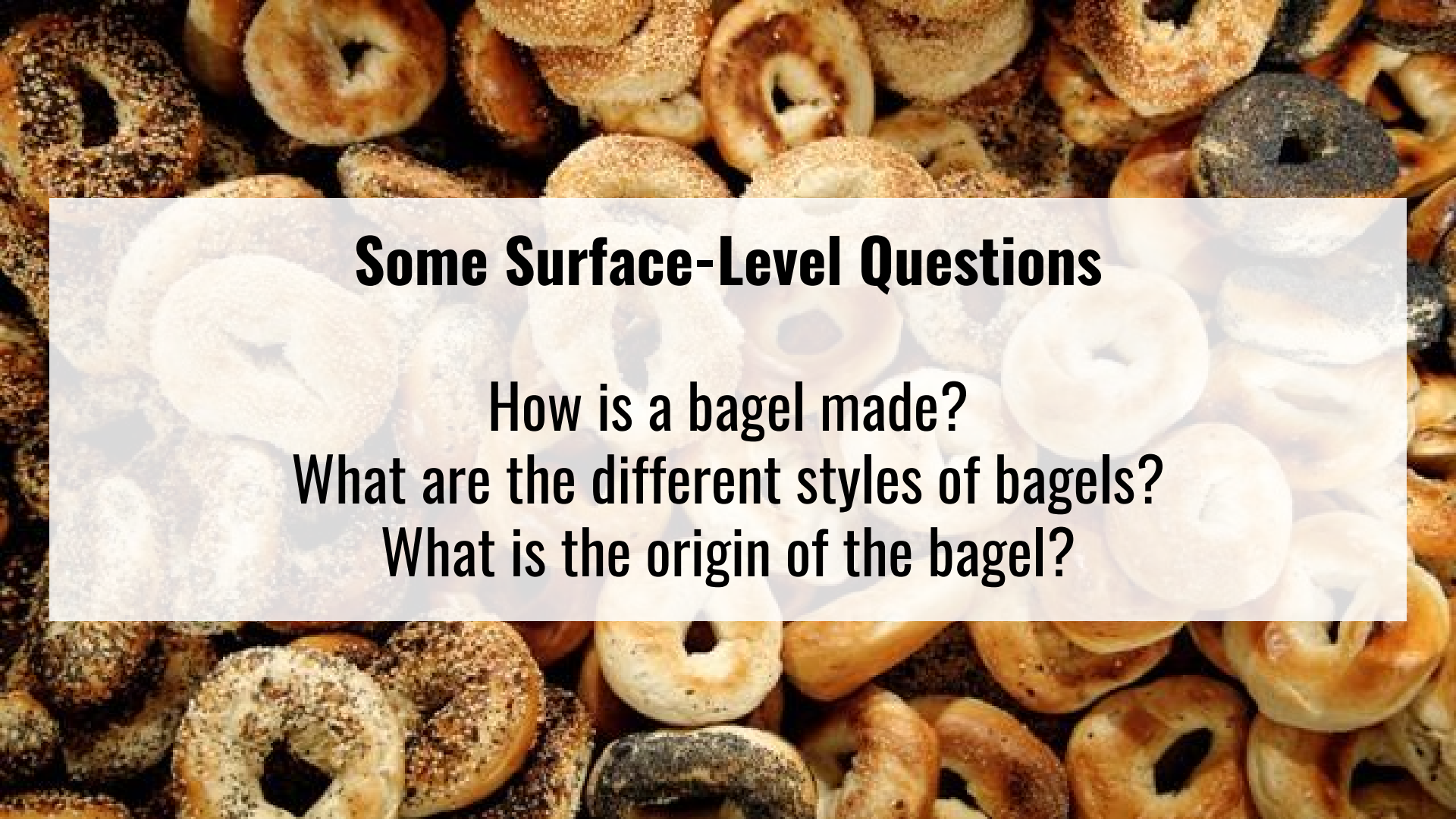
Bagels

Even computers need to eat

Introduction to Bagels

(what's all this about the
“structure and interpretation of
computer programs?”)





Some Surface-Level Questions

How is a bagel made?

What are the different styles of bagels?

What is the origin of the bagel?

A few fun facts about bagels

- The most popular (or at least most *oft-consumed*) bagel is the **plain bagel**.
 - The largest bagel to date is an 868 lb. monster baked by Brueggers.
 - In 2008, Greg Chamitoff took bagels into space for the first time. One giant leap for bagelkind!
 - In Yeshivish, “sleeping a bagel” means “sleeping 12 hours straight.”
-



Goals.

How do you judge a bagel?

There are four pillars.

- 1. Taste**

The taste of a great bagel should resemble that of freshly baked bread.

- 2. Crispiness of Crust**

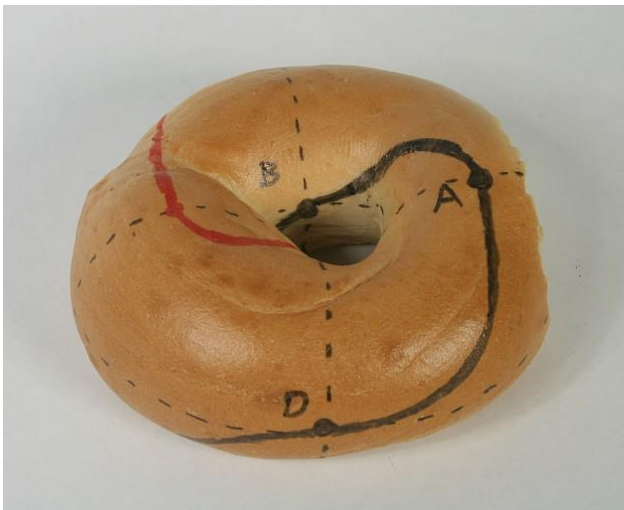
A great bagel should have a (very) slightly crispy crust.

- 3. Pull**

There should be a distinct “pull” when a piece is separated from the whole.

- 4. Chewiness**

Every great bagel should have a chewy inside.



(Advanced) For lovers of cream cheese: the Möbius bagel

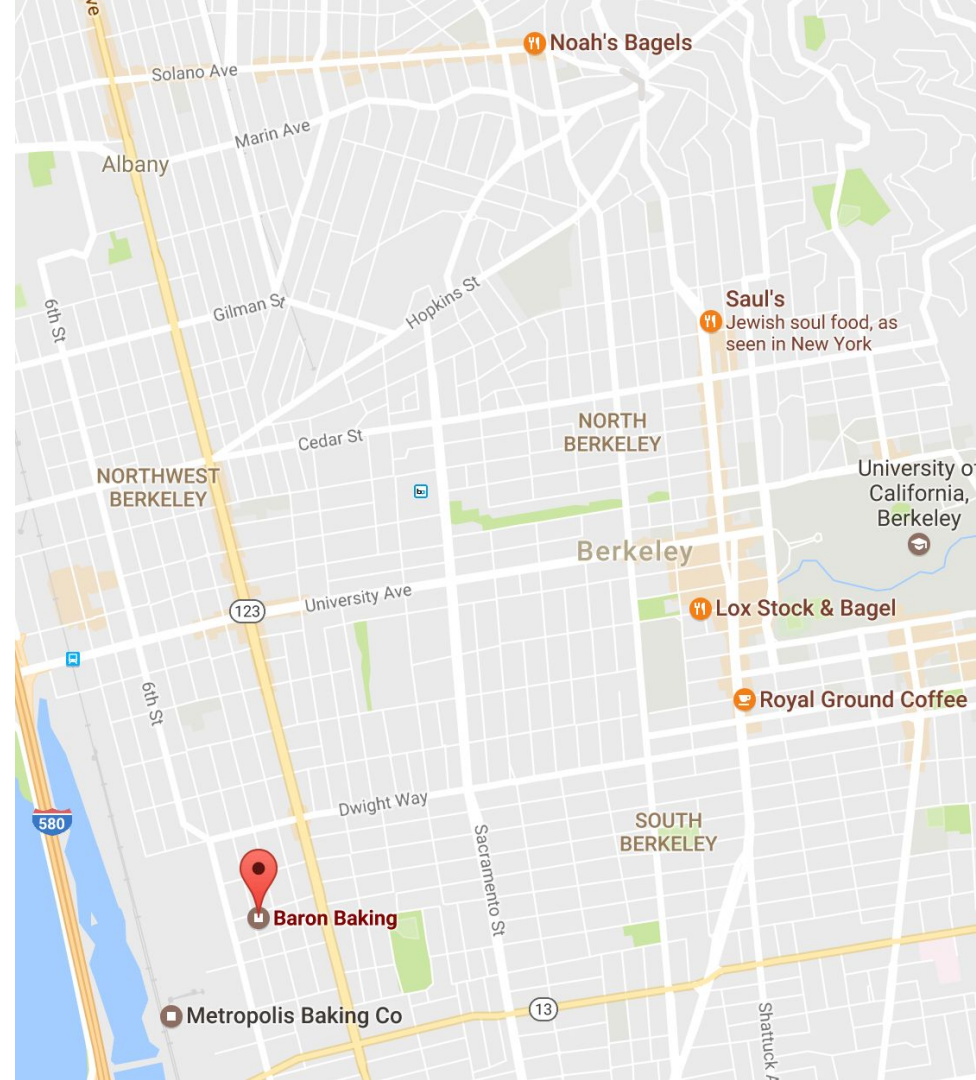
Images courtesy of [George Hart](#)

**So where can you get a decent
bagel around here?**



Baron Baking

- Order 48 hours in advance
- Order by the [baker's] dozen; good for a party

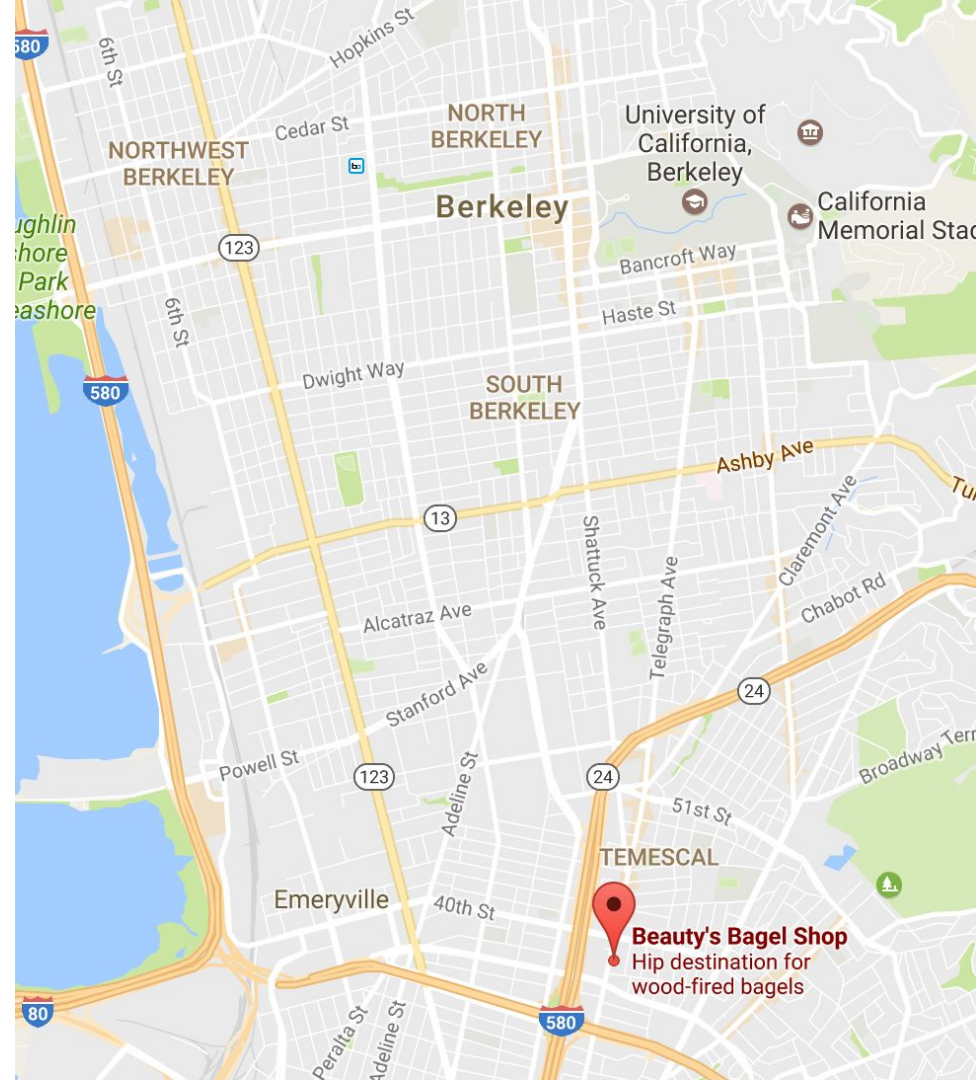




Baron bagels

Beauty's Bagel Shop

- Wood-fired bagels
- Nice ambience / cafe seating
- Relatively popular at standard bagel hours





Mini farm + taco (Beauty's; 4/19/17)

Beyond CS 61A

Courses, Projects, etc.

HKN Course Map

CS COURSE MAP



core



software



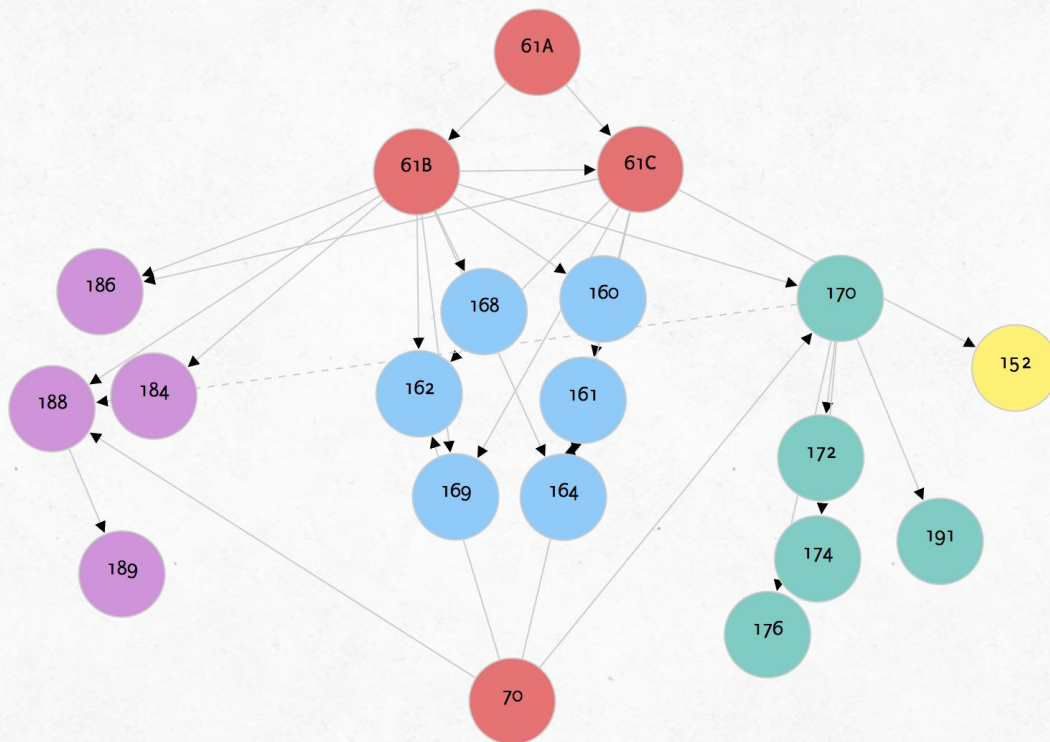
theory



applications



hardware



Required

Recommended

Courses

You're only at the start of a potentially very long educational journey! Three years (assuming you're a freshman) is a very long time.

If I were you, I would try to identify my primary fields of interest as early as possible... and then gear course selection mainly toward that. At the same time, don't neglect the value of a general education. Take advantage of the fact that you're at Berkeley.

Either way, quality over quantity.

** for reference, some of my favorites: 54, Japanese 1, 184, 188, Psych 1, 170, 194-26*

Projects

At this stage, I do encourage you to start something outside of your schoolwork. Make it meaningful, though! Think big (not TOO big of course, but not too small either).

I know it can be daunting (especially only having taken 61A), but I assure you that if you understood the content of this course and you're really interested in your project – i.e. you're willing to put in the work for it – you can definitely make something great.

I'm happy to help you cultivate ideas and maybe even give you a little more direction. Feel free to reach out!

Bottom Line?

- Try to pursue something that is both hard and important (and watch Scott Shenker's final 168 lecture so he can tell this to you in a more eloquent fashion).
- Keep up with non-CS hobbies/interests.
- **Eat a lot of bagels. This is possibly the most important thing that you can do with your time. Life is short, and there are only so many bagels that you can eat each day.**

This is probably the last time I'll
ever ask you, but...

Any questions?



Thank you for a great semester, everyone!
Do keep in touch. :)

