

This was CS50

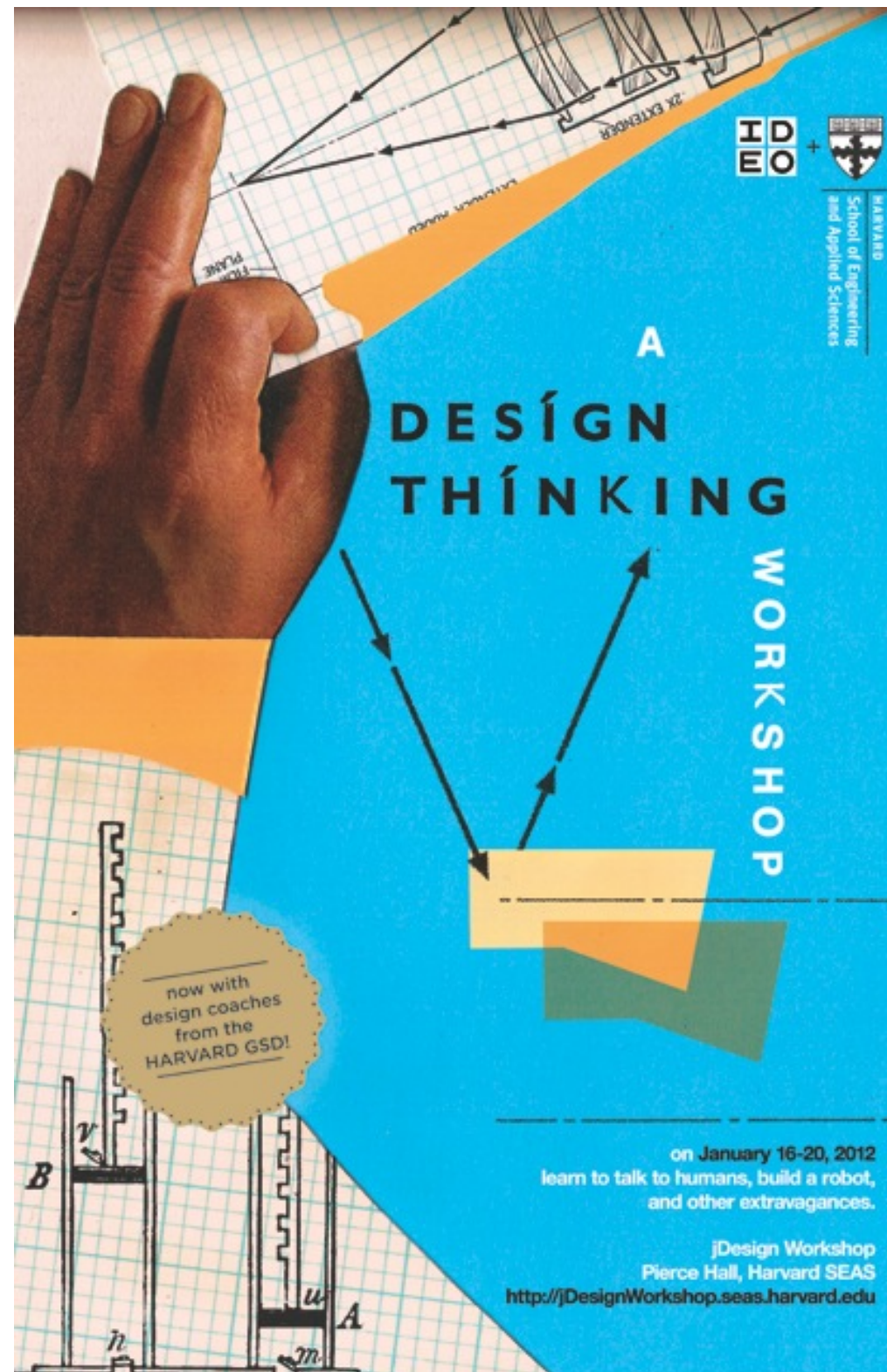
thanks



Undergraduate Council

- Harvard Undergraduate Council supports web development that improves student life. Ex:
 - **H-food.org** (Interactive HUDS menu)
 - **Eventplease.com** (Centralized events calendar)
 - **Crimsonlist.org** (Craigslist for Harvard)
- We assist student developers with funding, promotion, administrative issues.
- Email **ucpres@gmail.com** with your project idea if you want our help!

jDesignWorkshop.seas.harvard.edu





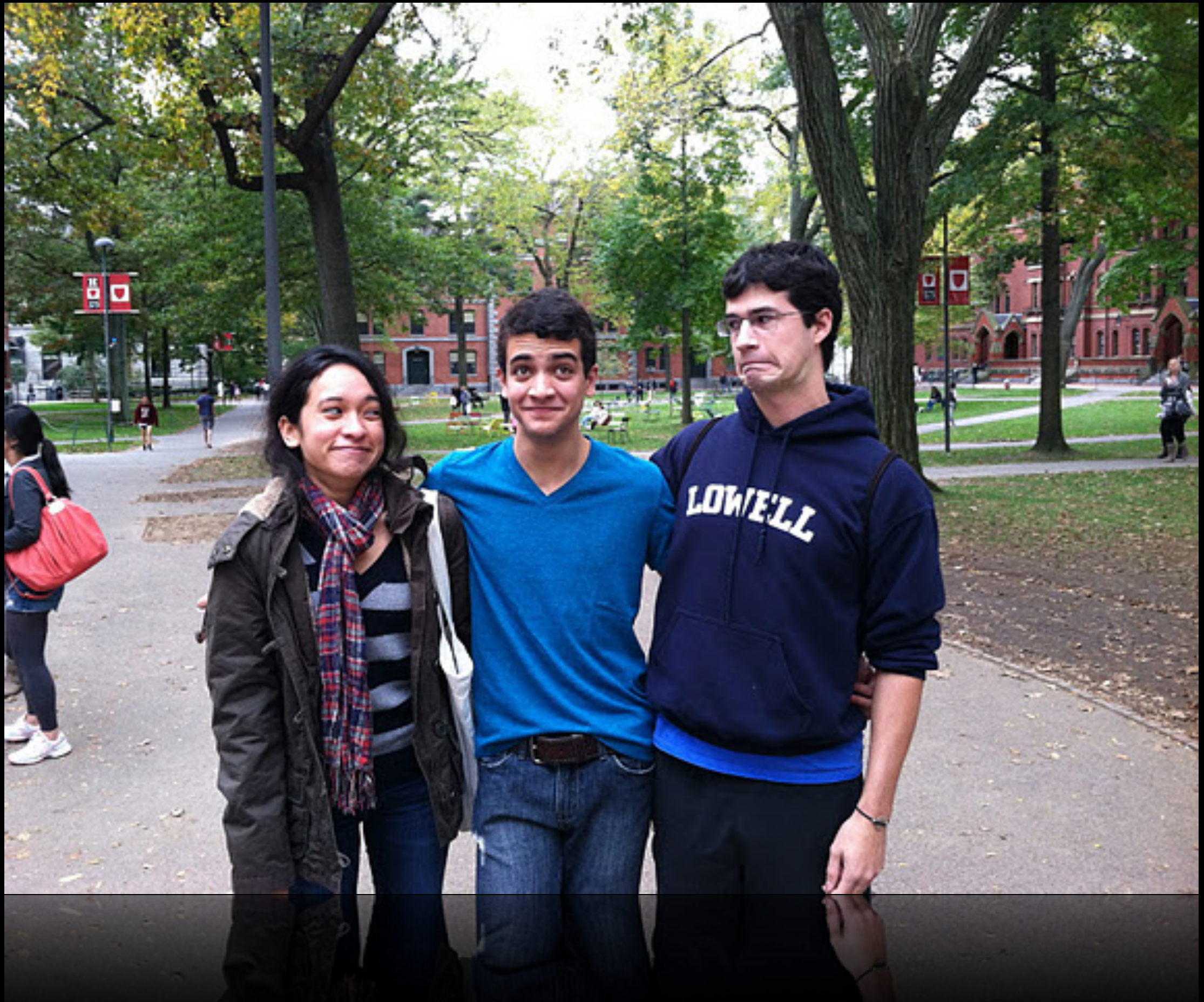




pset0

pset5





pset6

| THE BIG BOARD | | | | | | | |
|---------------|-------------------------|--------|--------|---------|--------|----------|-------|
| | Contestant | RAM | load() | check() | size() | unload() | TOTAL |
| 1 | Balaji Pandian | 11.862 | 1.040 | 0.000 | 0.000 | 0.000 | 1.040 |
| 2 | Merrill Hunter Lutsky | 8.074 | 0.940 | 0.150 | 0.000 | 0.230 | 1.320 |
| 3 | Daniel Phillip Robinson | 3.039 | 1.000 | 0.300 | 0.030 | 0.007 | 1.337 |
| 4 | Kevin Lee | 0.564 | 0.130 | 1.580 | 0.000 | 0.000 | 1.710 |
| 5 | Neal Wu staff | 0.503 | 0.120 | 2.750 | 0.000 | 0.000 | 2.870 |
| 6 | Joseph Ong staff | 1.003 | 0.130 | 2.810 | 0.000 | 0.000 | 2.940 |
| 7 | Peter Wu Hung staff | 0.863 | 0.130 | 2.840 | 0.000 | 0.000 | 2.970 |
| 8 | Rahul Dalal | 1.003 | 0.150 | 2.860 | 0.000 | 0.000 | 3.010 |
| 9 | Ben Simon Kuhn | 1.753 | 0.220 | 2.850 | 0.000 | 0.000 | 3.070 |
| 10 | Carl Kangming Gao | 1.003 | 0.280 | 2.910 | 0.000 | 0.000 | 3.190 |
| 10 | Carl Kangming Gao | 1.003 | 0.280 | 2.910 | 0.000 | 0.000 | 3.190 |
| 9 | Ben Simon Kuhn | 1.753 | 0.220 | 2.850 | 0.000 | 0.000 | 3.070 |
| 8 | Rahul Dalal | 1.003 | 0.150 | 2.860 | 0.000 | 0.000 | 3.010 |
| 7 | Peter Wu Hung staff | 0.863 | 0.130 | 2.840 | 0.000 | 0.000 | 2.970 |

pset7

BIG BOARD

| | Investor | Net Worth | Net Δ |
|----|-------------------------|---------------------|-----------------|
| 1 | Kenny Alan Lee | \$38,969,254,428.22 | +389,692,444.3% |
| 2 | Daniel Phillip Robinson | \$4,751,478.71 | +47,414.8% |
| 3 | Faheem Zaman | \$284,652.75 | +2,746.5% |
| 4 | Nick Perkons | \$124,009.42 | +1,140.1% |
| 5 | Kevin Ge Sun | \$85,004.10 | +750.0% |
| 6 | TJ Barber | \$61,321.41 | +513.2% |
| 7 | William Ziwei Chen | \$53,148.99 | +431.5% |
| 8 | Kevin Hu | \$28,672.49 | +186.7% |
| 9 | David J. Malan | \$18,010.00 | +80.1% |
| 10 | Jeffrey Joseph Molinari | \$14,727.14 | +47.3% |
| 10 | Jeffrey Joseph Molinari | \$14,727.14 | +47.3% |
| 9 | David J. Malan | \$18,010.00 | +80.1% |
| 8 | Kevin Hu | \$28,672.49 | +186.7% |
| 7 | William Ziwei Chen | \$53,148.99 | +431.5% |

CS50 Hackathon



THE
CS50
FAIR

life after 50

CS164

mobile software engineering

mac os

- CS50 Appliance
- Xcode
- Eclipse
- NetBeans
- Code::Blocks
- XAMPP

windows

- CS50 Appliance
- cygwin
- Eclipse
- NetBeans
- Code::Blocks
- Visual Studio
- XAMPP

linux

- CS50 Appliance
- gcc, gdb
- Eclipse
- NetBeans
- Code::Blocks
- XAMPP

- 1 take 2 slices of bread from the loaf
- 2 apply 2 tablespoons of jelly on both halves
- 3 apply 2 tablespoons of peanut butter same way
- 4 join the halves
- 5 have fun

when  clicked

say O hai, world!

say O hai, world!

```
#include <stdio.h>
```

```
int
```

```
main(void)
```

```
{
```

```
    printf("hello, world!\n");
```

```
}
```

make hello


```
gcc -ggdb -std=c99 -Wall -Werror    hello.c -lcrypt -lcs50 -lm -o hello
```

| | | | | | | | |
|----------|----------|----------|----------|----------|----------|----------|----------|
| 10000011 | 00000001 | 00010001 | 00000000 | 00111101 | 11111100 | 01110100 | 00111101 |
| 00000000 | 01000000 | 00000000 | 00000000 | 00000000 | 00000000 | 00000000 | 00000000 |
| 10010000 | 00000000 | 00000000 | 00000000 | 01010000 | 00000000 | 00000111 | 00110000 |
| 00001011 | 00000001 | 00001011 | 00000011 | 00001010 | 00000000 | 00000000 | 00000000 |
| 00000000 | 00100000 | 00000000 | 00000000 | 00000000 | 00000000 | 00000000 | 00000000 |
| 00000000 | 00100000 | 00000000 | 00000000 | 00000000 | 00000000 | 00000000 | 00000000 |
| 00000000 | 00000000 | 00000000 | 00000000 | 00000000 | 00000000 | 00000000 | 00000000 |
| 01110000 | 00010000 | 00000000 | 00100000 | 00000001 | 00000000 | 00000000 | 00000000 |
| 00000000 | 00000000 | 00000000 | 00100000 | 00000001 | 00000000 | 00000000 | 00000000 |
| 00000000 | 00000000 | 00000000 | 01000000 | 00000001 | 00000000 | 00000000 | 00000000 |
| 00000000 | 00100000 | 00000000 | 01000000 | 00000001 | 00000000 | 00000000 | 00000000 |
| 11111111 | 11111111 | 11111111 | 11111111 | 11111111 | 11111111 | 11111111 | 11111111 |
| 10010000 | 10000000 | 00000000 | 01000000 | 00000001 | 00000000 | 00000000 | 00000000 |
| 00101110 | 01100100 | 01111001 | 01101110 | 01100001 | 01101101 | 01101001 | 01100011 |
| 10110000 | 00000100 | 00000000 | 00100000 | 00000001 | 00000000 | 00000000 | 00000000 |
| 10110000 | 00000100 | 00000000 | 00100000 | 00000001 | 00000000 | 00000000 | 00000000 |
| 10100000 | 00000001 | 00000000 | 00000000 | 00000000 | 00000000 | 00000000 | 00000000 |
| 10110000 | 00000100 | 00000000 | 00000000 | 00000000 | 00000000 | 00000000 | 00000000 |
| 00000000 | 00000000 | 00000000 | 00000000 | 00000000 | 00000000 | 00000000 | 00000000 |
| 00000000 | 00000000 | 00000000 | 00000000 | 00000000 | 00000000 | 00000000 | 00000000 |
| 00000000 | 00000000 | 00000000 | 00000000 | 00000000 | 00100000 | 00000000 | 00000000 |

. . .

bitwise operators

&

|

^

<<

>>

$a = a \wedge b;$

$b = a \wedge b;$

$a = a \wedge b;$

```
<!DOCTYPE html>
```

```
<html>
```

```
  <head>
```

```
    <title>hello, world!</title>
```

```
  </head>
```

```
  <body>
```

```
    hello, world!
```

```
  </body>
```

```
</html>
```

```
<?= "hello, world!" ?>
```



```
alert("hello, world!");
```

This is...

almost the end...