Combinatorial Testing

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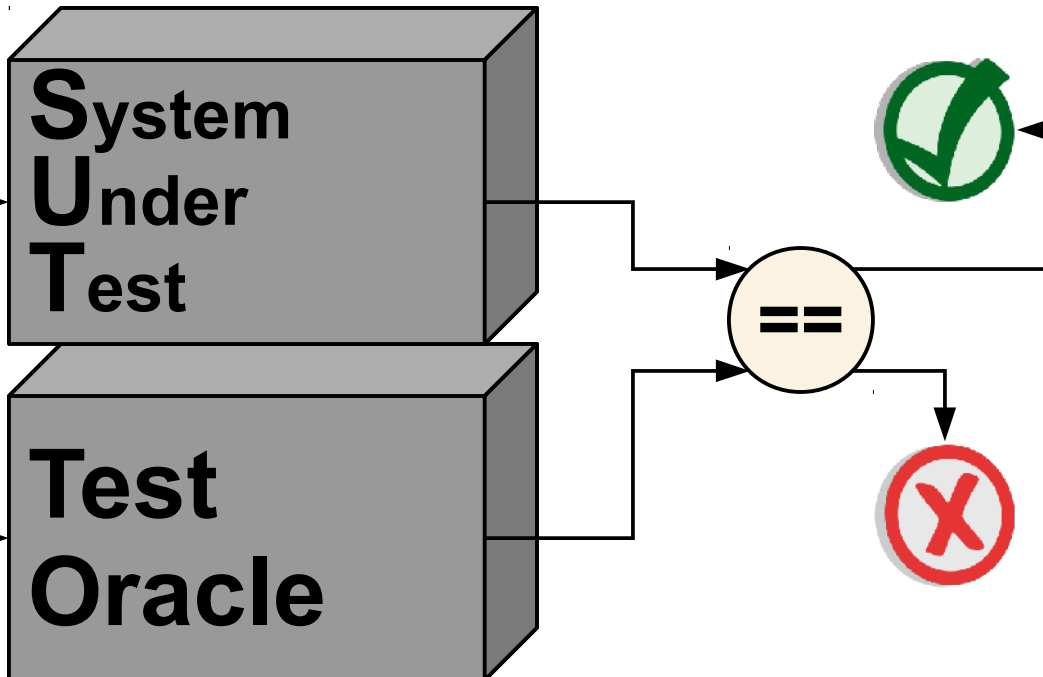
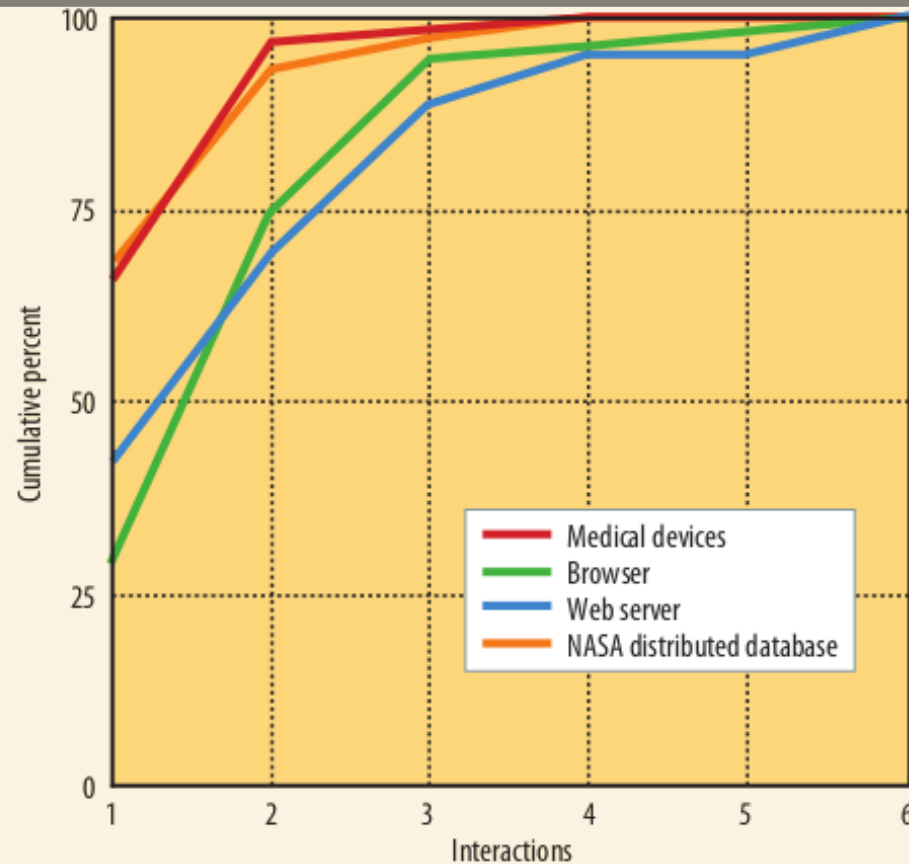**email: mark@mark-fink.de**

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Test Data

```
spec = {
    'font':          ['arial', 'tahoma', 'brushScript', 'monotypeCorsive'],
    'bold':          [True, False],
    'italic':        [True, False],
    'strikethrough': [True, False],
    'underline':     [True, False],
    'color':         ['black', 'yellow', 'white', 'blue', 'red', 'green'],
    'size':          ['small', 'nominal', 'large', 'xLarge', 'xxLarge', 'xxx
}
```

System Under Test

Test Oracle

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Figure 2. Cumulative error detection rate for fault-triggering conditions. Many faults were caused by a single parameter value, a smaller proportion resulted from an interaction between two parameter values, and progressively fewer were triggered by three-, four-, five, and six -way interactions.

Parameters

Test	1	2	3	4	5	6	7	8	9	10
1	0	0	0	0	0	0	0	0	0	0
2	1	1	1	1	1	1	1	1	1	1
3	1	1	1	0	1	0	0	0	0	1
4	1	0	1	1	0	1	0	1	0	0
5	1	0	0	0	1	1	1	0	0	0
6	0	1	1	0	0	1	0	0	1	0
7	0	0	1	0	1	0	1	1	1	0
8	1	1	0	1	0	0	1	0	1	0
9	0	0	0	1	1	1	0	0	1	1
10	0	0	1	1	0	0	1	0	0	1
11	0	1	0	1	1	0	0	1	0	0
12	1	0	0	0	0	0	0	1	1	1
13	0	1	0	0	0	1	1	1	0	1

Figure 3. Three-way covering array for 10 parameters with two values each. Any three columns, selected in any order, contain all eight possible values of three parameters: 000,001,010,011,100,101,110,111.

Grandma Gatewood

Gatewood hiked the Appalachian Trail in 1955 at the age of 67, wearing sneakers and carrying an army blanket, a raincoat, and a plastic shower curtain which she carried in a homemade bag slung over one shoulder, thus making her a pioneer of Ultralight backpacking.

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csrc.nist.gov/groups/SNS/acts/Crosstalk0806KuhnLeiKacker.pdf

Original C version:

http://burtleburtle.net/bob/math/jenny.html

Fork me on github:

http://github.com/markfink/grandma

Packaged Releases:

pypi.python.org/pypi/grandma/

Thanks!