

# ICPC Sessions OR How to Solve Problems

Sebastian Claici  
sebastianclaici@gmail.com

November 28, 2012

# What is this about?

- Algorithms; more than you did in COMP1009!

# What is this about?

- Algorithms; more than you did in COMP1009!
- Using algorithms to solve problems!

# What is this about?

- Algorithms; more than you did in COMP1009!
- Using algorithms to solve problems!
- Beating Cambridge (and everyone else)!

# What is the ACM ICPC?

# Binary Search

```
int binary_search(int *array, int n, int x)
{
    int lo = 0, hi = n - 1;
    while (lo < hi) {
        int mid = lo + (hi - lo) / 2;
        if (array[mid] < x)
            lo = mid + 1;
        else hi = lo;
    }

    if (lo == hi && array[lo] == x)
        return lo;
    return -1;
}
```