# ICPC Sessions OR How to Solve Problems

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#### What is this about?

Algorithms; more than you did in COMP1009!

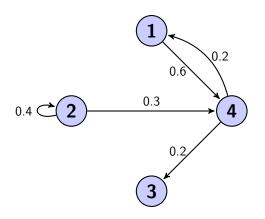
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- Beating Cambridge (and everyone else)!

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