

COMS/CSOR 4231, Analysis of Algorithms I

Jing Qian - jq2282@columbia.edu

September 4, 2018

Homework 0

1. Department: Computer Science

2. Program: Master of Science

3. Year: 2018 Fall

4. List relevant background courses and where you have taken them:

Algebra and Geometry, Advanced Mathematical Analysis, Practical Fundamentals of Computer, C Language Programming, Probability Theory and Mathematical Statistics, Methods of Mathematics and Physics, Mathematical Modeling, Group Theory in Physics.
From Harbin Institute of Technology in China.

5. How familiar are you with the following topics (None, Somewhat, Very):

- 1. Recurrences:** Very
- 2. Proof by induction:** Very
- 3. Big-O notation:** Very
- 4. Probability:** Very
- 5. Balanced search trees:** Somewhat
- 6. Graph algorithms:** None
- 7. NP-completeness:** None

6. Why are you taking this course?

There are two main reasons I take this course:

1. In my previous study majoring in Physics, I wrote some code by myself which I found long-winded and slow. I want to make my code efficient and concise.
2. Many algorithms themselves are interesting to learn. I appreciate and enjoy the human wisdom and aesthetics in algorithms.