University of Washington March 27, 1998
Department of Computer Science and Engineering
CSE 521, Spring 1998

Background Survey, March 30, 1998

Please do *not* put your name on this survey.

Problem 1:
Are you a Computer Science and Engineering Major?

Problem 2:
What is your background in Algorithms? What texts have you used.?

Problem 3:

0 – Never heard of it.

1 – Saw it and forgot it.

2 – Vague memories.

3 – Remember general outline, some details hazy.

4 – Fairly complete understanding, could recover details if necessary.

5 – Know everything there is to know about it. Have written research papers on the subject.

Rank your familiarity with the following problems/results/areas using the scale above:

1. Solution to recurrences of the form $T(n) = aT(n/b) + n^c$.
2. Probability Theory
3. Balanced Binary Trees
4. Hashing

5. Average case analysis of quicksort
6. Randomized Linear Median Algorithm
7. Deterministic Linear Median Algorithm
8. Union-Find Data structure
9. $O(n \log^* n)$ (or $O(n\alpha(n))$) analysis of Union Find with weighted union and path compression.
10. Kruskal's Algorithm
11. Prim's Algorithm
12. Boruvka's Algorithm
13. Dijkstra's Algorithm
14. Floyd's Algorithm
15. Johnson's Algorithm
16. Ford-Fulkerson Algorithm
17. Goldberg's Algorithm
18. Strassen's Algorithm
19. FFT
20. Cook's Theorem
21. Travelling Salesman Problem
22. Bin Packing
23. Linear Programming
24. Computational Geometry

Problem 4:
Are there any topics that you have a special interest in seeing covered?