

**University of Central Florida**

**Department of Computer Science**

**CDA 5106: Fall 2023**

**Machine Problem 2: Branch Prediction**

**by**

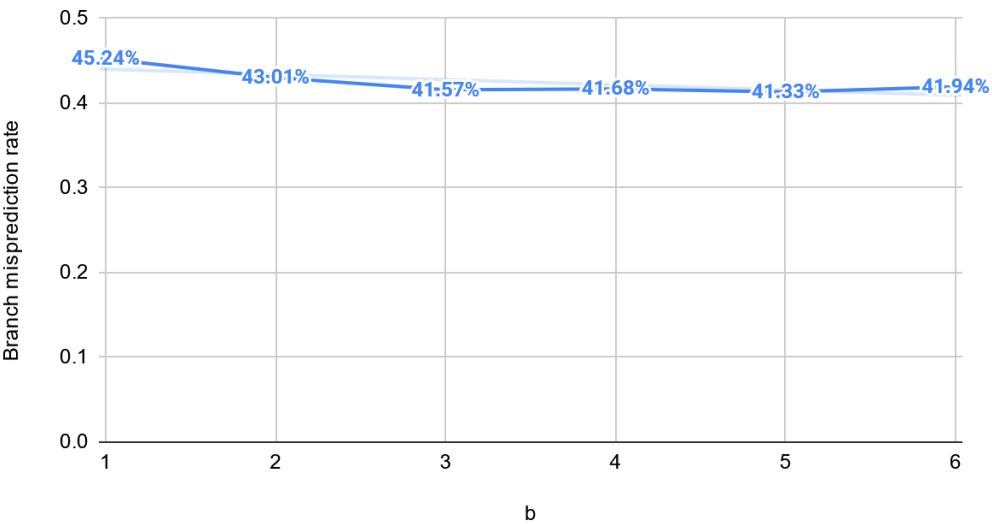
**Gabriela Shamblin**

Honor Pledge: "I have neither given nor received unauthorized aid on this test or assignment."

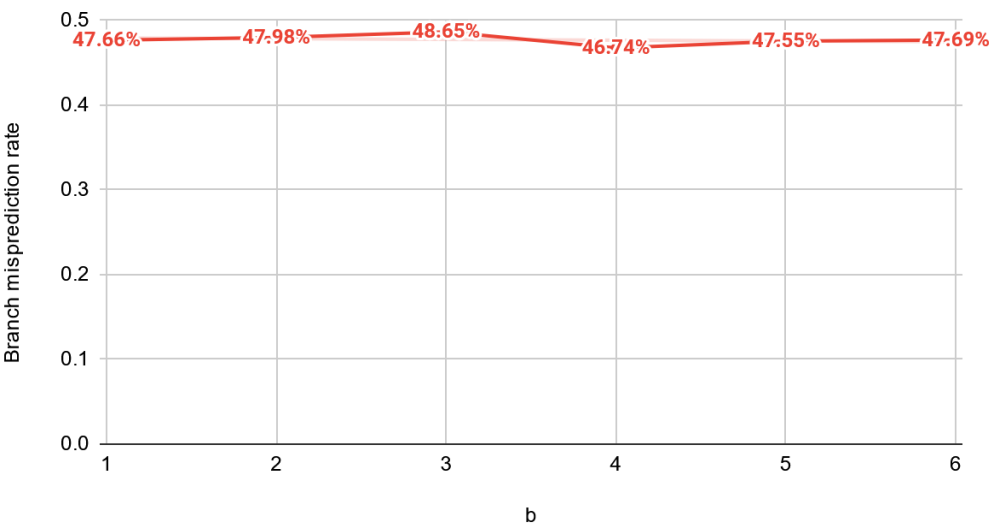
Student's electronic signature: Gabriela Shamblin  
(sign by typing your name)

b	gcc_trace
1	0.4524
2	0.4301
3	0.4157
4	0.4168
5	0.4133
6	0.4194
b	perl_trace
1	0.4766
2	0.4798
3	0.4865
4	0.4674
5	0.4755
6	0.4769
b	jpeg_trace
1	0.5002
2	0.3098
3	0.2912
4	0.2814
5	0.28
6	0.2794

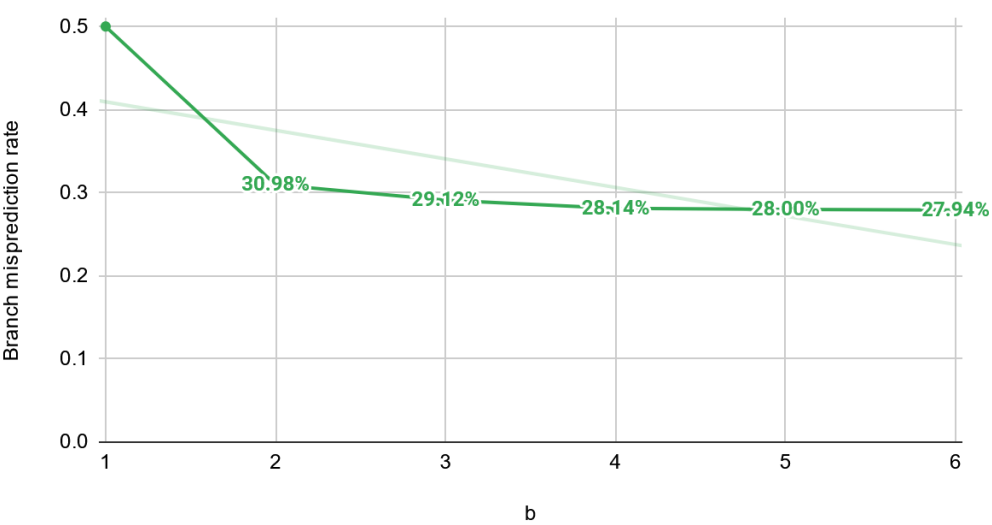
gcc\_trace, smith



perl\_trace, smith

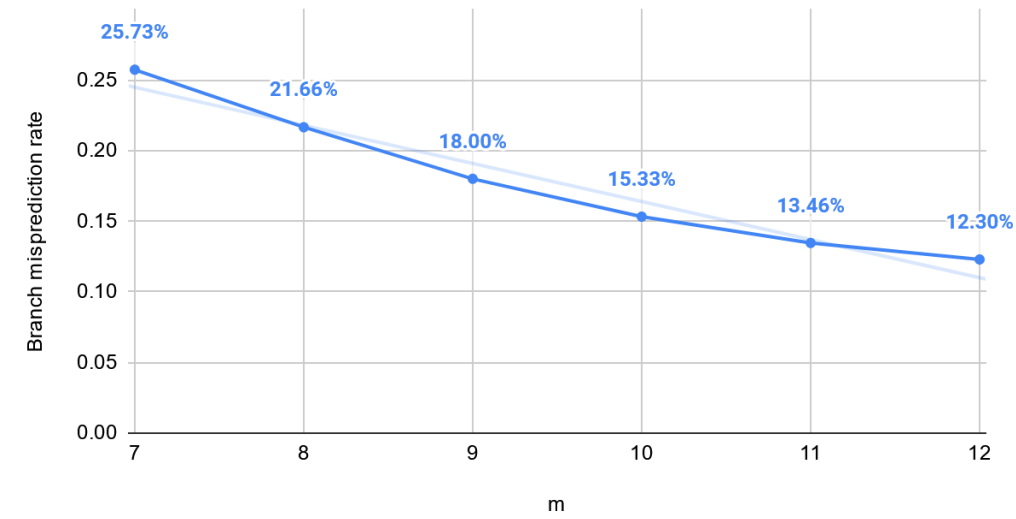


jpeg\_trace, smith

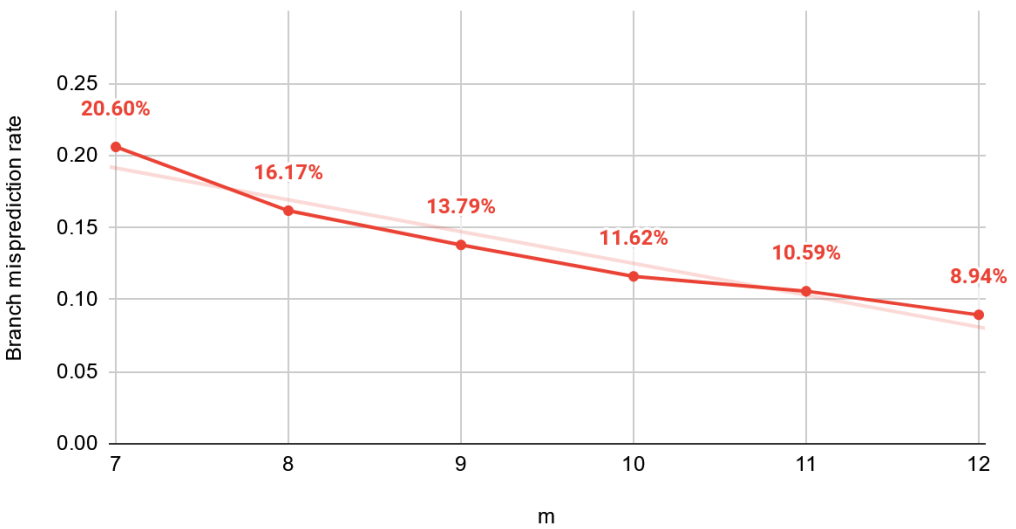


m	gcc_trace
7	0.2573
8	0.2166
9	0.18
10	0.1533
11	0.1346
12	0.123
m	perl_trace
7	0.206
8	0.1617
9	0.1379
10	0.1162
11	0.1059
12	0.0894
m	jpeg_trace
7	0.0785
8	0.0775
9	0.0769
10	0.0765
11	0.0751
12	0.0749

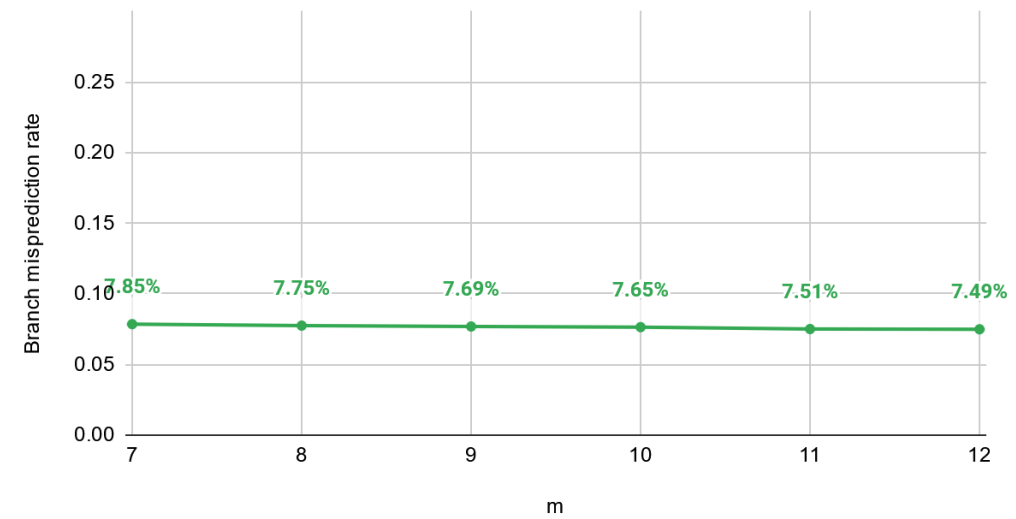
gcc\_trace, bimodal



perl\_trace, bimodal

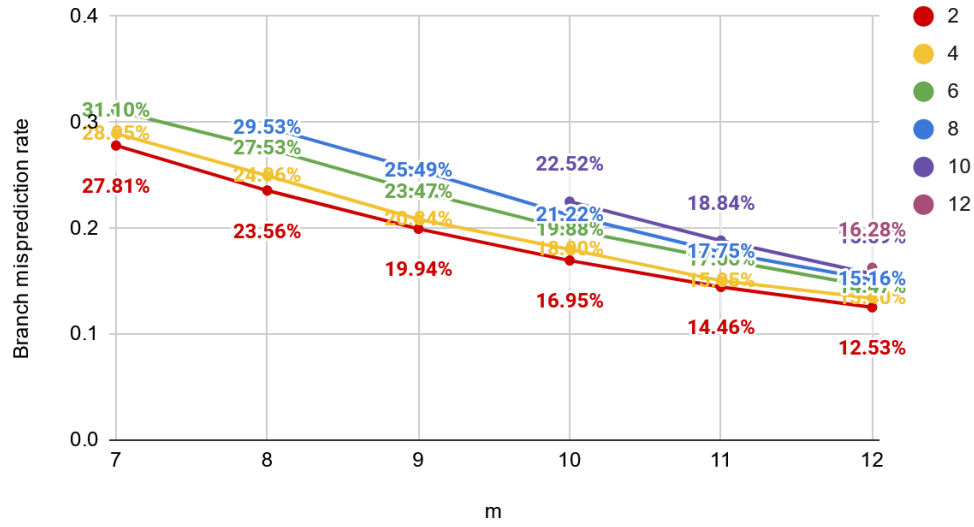


jpeg\_trace, bimodal

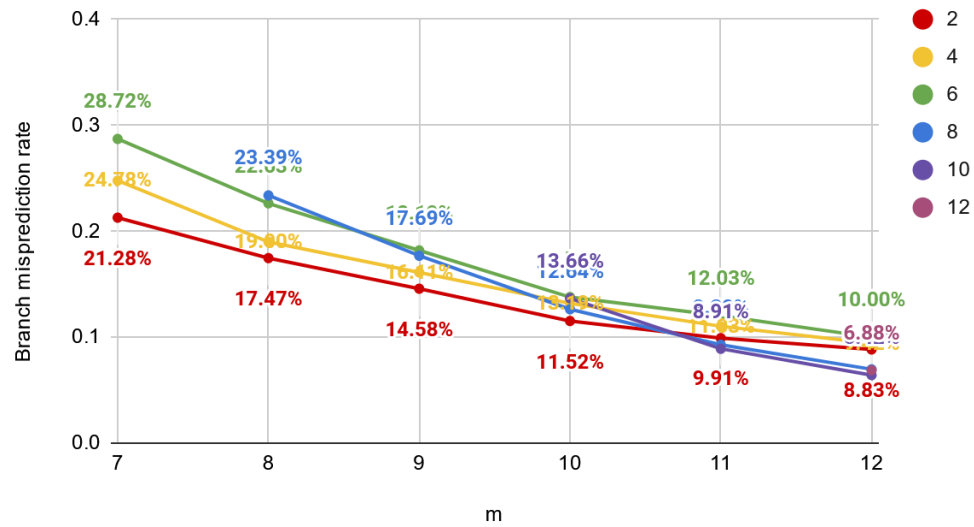


m, gcc_trace	2	4	6	8	10	12
7	0.2781	0.2895	0.311			
8	0.2356	0.2496	0.2753	0.2953		
9	0.1994	0.2084	0.2347	0.2549		
10	0.1695	0.18	0.1988	0.2122	0.2252	
11	0.1446	0.1505	0.1706	0.1775	0.1884	
12	0.1253	0.134	0.1447	0.1516	0.1569	0.1628
m, perl_trace	2	4	6	8	10	12
7	0.2128	0.2478	0.2872			
8	0.1747	0.19	0.2263	0.2339		
9	0.1458	0.1611	0.1819	0.1769		
10	0.1152	0.1319	0.1378	0.1264	0.1366	
11	0.0991	0.1103	0.1203	0.0929	0.0891	
12	0.0883	0.0942	0.1	0.0697	0.0642	0.0688
m, jpeg_trace	2	4	6	8	10	12
7	0.0841	0.0865	0.0949			
8	0.0804	0.082	0.0882	0.0907		
9	0.0794	0.0804	0.0846	0.0832		
10	0.0787	0.0797	0.0837	0.0805	0.0798	
11	0.0745	0.0762	0.079	0.075	0.0747	
12	0.0743	0.076	0.0784	0.0728	0.073	0.0735

gcc\_trace, gshare



perl\_trace, gshare



jpeg\_trace, gshare

