

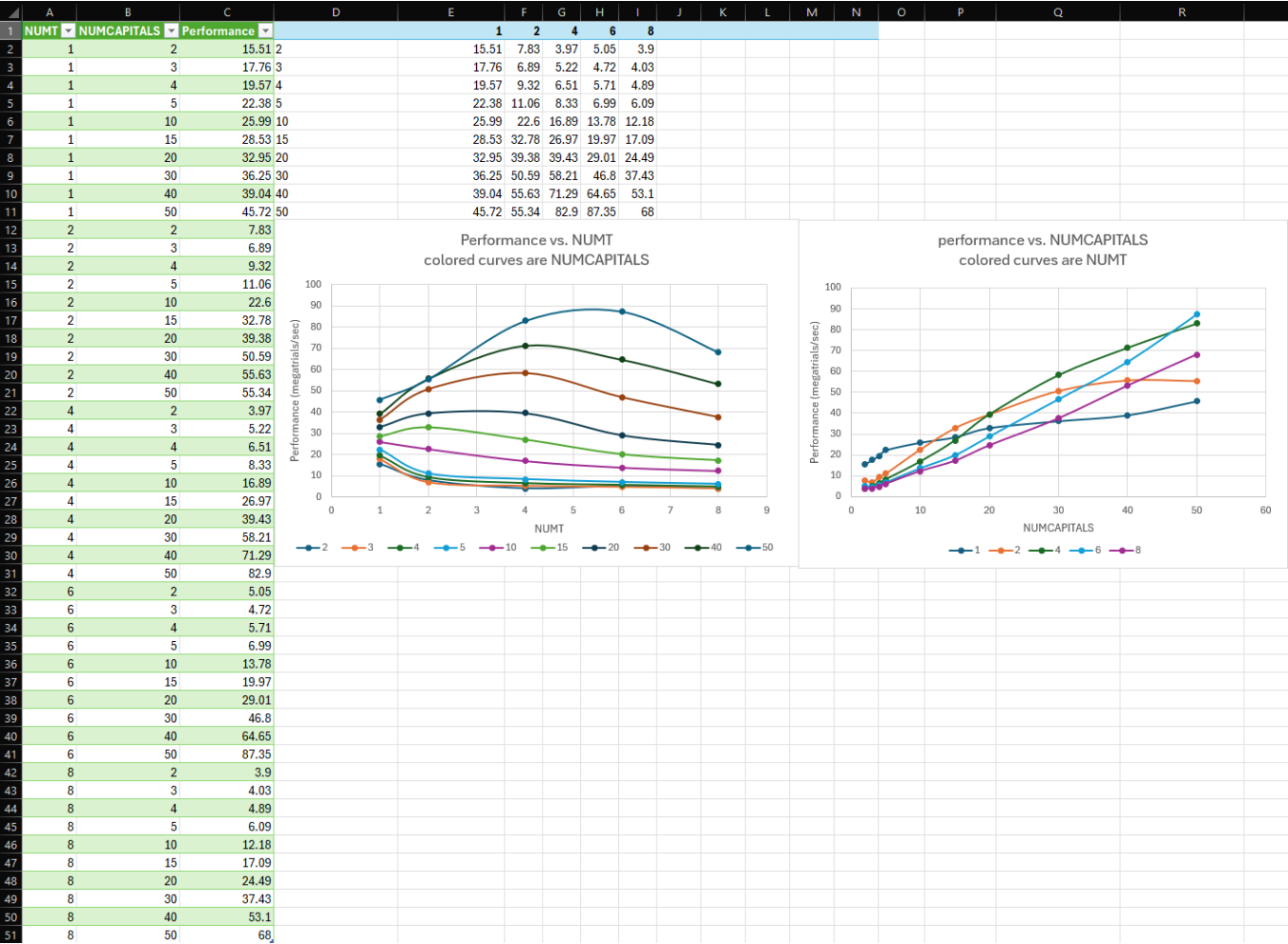
CS 475 - Project 3: K-means: A Real Application Parallel Challenge

Name: Luke Scovel
Email: scovell@oregonstate.edu
Project Number: 3
Project Name: K-means: A Real Application Parallel Challenge

Machine Information

- rabbit.engr.oregonstate.edu
- CentOS Linux release 7.9.2009 (Core)
- g++ compiler

Performance Data



Analysis

I found that the average performance of the thread count usually peaked when it was at 6 threads. Also, average performance continued to rise the more capitals that were added. These have been pretty consistent results accross the different projects. It might be interesting to keep increasing the number of capitals to see if performance starts to plateau.

List of Cities (Extra Credit)

1:	98.10 ,	26.77 ,	Edinburg,TX
2:	83.90 ,	39.64 ,	Dayton,OH
3:	85.24 ,	33.60 ,	SouthFulton,GA
4:	85.45 ,	36.84 ,	Louisville,KY
5:	119.60 ,	36.65 ,	Clovis,CA
6:	77.31 ,	36.38 ,	NewportNews,VA
7:	119.04 ,	35.35 ,	Bakersfield,CA
8:	83.74 ,	42.42 ,	AnnArbor,MI
9:	82.42 ,	28.83 ,	Gainesville,FL
10:	80.43 ,	34.46 ,	Columbia,SC
11:	114.74 ,	36.40 ,	NorthLasVegas,NV
12:	85.94 ,	40.50 ,	Fishers,IN
13:	112.00 ,	33.37 ,	Tempe,AZ
14:	122.26 ,	47.55 ,	Renton,WA
15:	117.33 ,	34.47 ,	Victorville,CA
16:	117.44 ,	34.03 ,	JurupaValley,CA
17:	108.55 ,	45.79 ,	Billings,MT
18:	101.58 ,	33.02 ,	Lubbock,TX
19:	88.97 ,	41.99 ,	Rockford,IL
20:	81.06 ,	41.00 ,	Akron,OH
21:	91.08 ,	31.55 ,	BatonRouge,LA
22:	88.77 ,	37.08 ,	Clarksville,TN
23:	104.93 ,	39.71 ,	Denver,CO
24:	122.17 ,	37.92 ,	Berkeley,CA
25:	71.21 ,	42.29 ,	Cambridge,MA
26:	117.13 ,	32.95 ,	SanDiego,CA
27:	95.18 ,	29.78 ,	Pasadena,TX
28:	77.54 ,	43.03 ,	Rochester,NY
29:	76.90 ,	39.01 ,	Washington,DC
30:	94.34 ,	44.32 ,	Minneapolis,MN
31:	75.31 ,	40.30 ,	Philadelphia,PA
32:	116.40 ,	43.60 ,	Meridian,ID
33:	121.67 ,	37.41 ,	SanJose,CA
34:	97.61 ,	30.46 ,	RoundRock,TX
35:	95.04 ,	38.65 ,	Olathe,KS
36:	120.93 ,	39.10 ,	Roseville,CA
37:	111.98 ,	40.69 ,	WestValleyCity,UT
38:	73.03 ,	41.77 ,	Waterbury,CT
39:	111.65 ,	40.25 ,	Provo,UT
40:	117.17 ,	33.58 ,	Murrieta,CA
41:	117.33 ,	47.67 ,	Spokane,WA
42:	119.63 ,	34.47 ,	Ventura,CA
43:	106.64 ,	33.64 ,	LasCruces,NM
44:	80.40 ,	26.36 ,	CoralSprings,FL
45:	117.93 ,	33.85 ,	Fullerton,CA
46:	118.38 ,	34.23 ,	Burbank,CA
47:	96.94 ,	33.22 ,	Frisco,TX
48:	122.58 ,	45.04 ,	Salem,OR
49:	122.87 ,	38.09 ,	SantaRosa,CA

