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Marking Scheme for Assignment 2: Maximum score = 24

Basic Simulated Annealing Algorithm

Score	0	2	4
Description	The implementation does not perform simulated annealing correctly.	The implementation performs simulated annealing, but problems evaluating moves properly.	The implementation correctly performs simulated annealing.

Cost Function Calculation:

Score	0	1	2
Description	The cost function calculation is not correct.	The cost function calculation is not correct, but is within a constant factor.	The cost function calculation is correct.

Efficiency:

Score	0	2	4
Description	The implementation is not efficient; run-time is much longer than it needs to be.	The implementation is somewhat efficient, but small changes could make it faster. (example: cost is calculated from scratch for each move)	The implementation is efficient; there is clear evidence of care creating an algorithm that runs fast.

Results (Annealing schedule tuning): How good are the results (compared to the rest of the class?).

Score	0	2	4
Description	The results (final cost function) is among the worst 25% in the class.	The results (final cost function) is better than the bottom 25% of the class, but worse than the top 25% of the class. The report contains evidence that some attempt at schedule "tuning" was made.	The results are among the best 25% of the class. The report contains good evidence of schedule "tuning"

Graphics:

Score	0	1	2
Description	No graphics.	The graphics only show the final solution (or a small number of intermediate solutions)	The graphics clearly shows the progress of the algorithm as it progresses.

Code Quality:

Score	0	1	2	3
Description	Code is lacking in structure and comments.	Code is of sufficient "academic code" quality, including some comments.	Code is of good "academic code" quality including extensive comments. Code is well structured.	Code is of industrial quality, including evidence of unit tests and/ or extensive system tests.

Report (maximum 3 pages):

Score	1	2	3
Description	Report is unclear or difficult to read and/or understand..	Report describes most aspects of marking scheme clearly. The English has grammar/clarity errors that would not be acceptable in a major IEEE or ACM journal or conference.	Report describes all aspects of marking scheme clearly. The English is of a professional standard that would be acceptable in a major IEEE or ACM journal or conference.

Initiative: (be sure to identify any extensions in your report):

Score	0	1	2
Description	Assignment implemented as in handout.	The implementation contains one or more straightforward extensions.	The implementation goes beyond what is described in the handout in a non-trivial way.

range updates / initial clustering

UNIVERSITY OF BRITISH COLUMBIA
DEPARTMENT OF ELECTRICAL AND COMPUTER ENGINEERING

CPEN 513: CAD Algorithms for Integrated Circuits
2022/2023 Term 2

Assignment 2 – Average Scores for submitted assignments that reported final cost for all circuits

3 assignments not included because the calculation of the cost function had errors

3487
3681
3728
3769
4679
5338
9798