Future of Square Dancing Programming and Problem Solving

Kailash Meiyappan Rajan Bhargava Yogesh Garg

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Timeline

- Week1 spiral shape, dance all pairs, prove it dances with all pairs
- $\bullet\,$ week 2 - small and medium strategies, dance movedance and dance dance move
- Week3 hexagonal packing
- Week4 large d using tiling
- Final deliverable group6 strat for small, danced ancemove for medium, hexagonal for 1840, large d strategy

Introduction

Strategies used

Different strats for different D values

Finding All soulmates

Dance Dance Move

Packing - Hexagonal Vs Square

Friend Estimation

Rotate Dancers (i to i+1)

Large d

Success Mantra

- Minimum Movements
- Minimize imbalance
- Heap based solution: minimum imbalance but many moves ### Score Estimation ### Draw backs # Failed Strategies ## Spiral ## Dance all pairs using an extra movement location ## Tiling

Parameter Tuning

D1, d2, d3

Score percentage