Analyzing Strategies for Voronoi Area Game

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- **Idea:** Predict optimal moves for victory in the Voronoi diagram area game and analyse resulting patterns.
- **Dataset:** Self-made data-set by simulating in-house version of said game.
- **Relevant Papers:**

1. *MCTS Experiments on the Voronoi Game*
Bouzy, B., Métivier, M., Pellier, D.
In: van den Herik, H.J., Plaat, A. (eds) Advances in Computer Games. ACG 2011. Lecture Notes in Computer Science, vol 7168. Springer, Berlin, Heidelberg.
2. *The Discrete Voronoi Game in* $\mathbb{R}^2$
Aritra Banik, Bhaswar B. Bhattacharya, Sandip Das, Satyaki Mukherjee
Computational Geometry, Volume 63, 2017, Pages 53-62, ISSN 0925-7721.

- **Work Distribution:**
  - Samir: Literature review on vaible ML algorithms, generating corresponding dataset.
  - Sandipan: Literature review on Computational Geometry and expected patterns in observations.
  - Both: Slides, Reports, and Implementation of Algorithms.
- **Goals for Mid-term:**
  - Curating data-set and organisation.
  - Implementation, optimization and comparison of different ML algorithms on simulatory dataset.
- **Expected Results:**
  - Optimal prediction with high win-rate against test data.