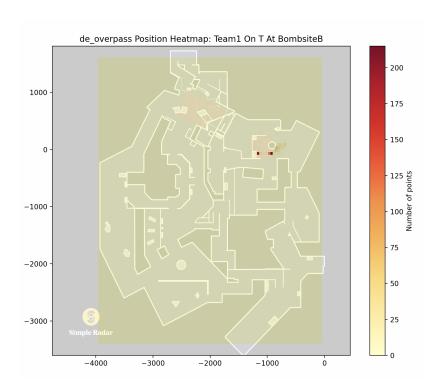
## Evil Geniuses Software Engineer Intern Assessment

## Bienn Viquiera

May 30, 2023

- 2A) Is entering via the light blue boundary a common strategy used by Team2 on T (terrorist) side? No. Using the ProcessGameState class's method *point\_in\_boundary*, which checks if an x,y,z coordinate is within the given boundary vertices, reveals that Team2 has around 0.03% of their actions in the boundary on T side. Therefore, entering via the light blue boundary is not a common strategy from Team2.
- $\bullet\,$  2B) The average timer that Team2 on T (terrorist) side enters "BombsiteB" with least 2 rifles or SMGs is 0:46
- 2C) I interpreted this question as asking where the terrorists would be located when Team2 is on CT side. Therefore, Team1 on T side is the data that we must consider. My idea is to create a heatmap using the data of each player belonging to Team1 on T side inside BombsiteB and using that visual predict where the most common locations Team 1 terrorists on Bombsite B would be. With the generated heatmap, it can be seen that Team1 on T side is frequently located near the pillar and on site behind a box on site in bombsite B.



3) A simple solution that is easily accessible that doesn't require the user to execute code would be a web user interface that has dropdown choices for users to access which are used as inputs for the methods implemented. This solution would take less than 1 week of work because there is already API-like functionality which only needs to be deployed and queried to return an answer to a request. The tasks that would be required to achieve this solution include a web form that can use HTML/CSS/JS to communicate and an API containing the code from above to return and display the analysis of the data.

An even quicker solution that may be suitable for an audience who is more technologically inclined is a notebook program like Google Colab or Jupyter notebook where the code is prefilled and the values that need to be modified is clearly highlighted and the user can simply press run and receive outputs like heatmaps and probabilities from the methods.

P.S. thank you for the fun assessment. As an avid player of CSGO this was quite the nostalgia trip!