Report Notes

1 Introduction

Discussing project motivation and general overview of the goals and objectives of the project.

2 Background Research

Section detailing the preliminary research into the types of generation, costs, and existing performance etc.

3 Refined Scope

A more focused explanation of how we will approach the problem, detailing how research in the previous section has impacted what we hope to achieve.

4 Planning & Organisation

An overview of the planned approach and discussion of how best to organise this maintaining regular progress.

5 Implementation

5.1 Data Collection

Overview of the data required to approach our project and a methods of collection.

5.2 Predictor

First of the two major components of the project, will cover what our aim is, the approaches to achieving a predictor model, and evaluating our results performance.

5.2.1 Problem Definition

5.2.2 Possible Approaches

5.2.3 Our Approach

5.2.4 Evaluating Performance

5.2 Optimiser

The second part of our implementation, covering what our options were, why we chose a genetic approach, it's limitations and how we aim to improve from problems caused by the scale of the search space by finding seeds that are expected to perform well.

5.3.1 Problem Definition

5.3.2 Possible Approaches

5.3.4 Limitations of Approach

5.3.5 Improvements to seed choosing

5 Evaluation

An evaluation of our projects results, how well the optimiser performs and comparing to real world data. Also discussing how trustworthy the results are and where errors could propagate from.

6 Future Work

Discussion of where the work will go next, such as looking at making predictions based on long term trends to future proof against climate change and explorations of more complex evolutionary algorithms and the possibility of using neural networks as a top layer to guide the decisions of which seeds should be evaluated. (https://proceedings.neurips.cc/paper/2021/hash/d073bb8d0c47f317dd39de9c9f004e9d-Abstract.html)

7 Conclusion

Summarise the findings and our approach, rounding up the short comings we discovered and the areas that we have seen good results.