Project Template

Richard Bellman and Alan Turing

December 17, 2016

1 Introduction

A description of the purpose, goals, and scope of your system or empirical investigation. You should include references to papers you read on which your project and any algorithms you used are based. Include a discussion of whether you adapted a published algorithm or devised a new one, the range of problems and issues you addressed, and the relation of these problems and issues to the techniques and ideas covered in the course.

2 Background and Related Work

For instance, [1].

3 Problem Specification

A clear description of the problem you are solving in both general terms and how you've mapped it to a formal problem specification.

4 Approach

A clear specification of the algorithm(s) you used and a description of the main data structures in the implementation. Include a discussion of any details of the algorithm that were not in the published paper(s) that formed the basis of your implementation. A reader should be able to reconstruct and verify your work from reading your paper.

Algorithm 1 Here is the algorithm.

```
procedure MyAlgorithm(b)
    a ← 10
end procedure
```

	Score
Approach 1	
Approach 2	

Table 1: Description of the results.

5 Experiments

Analysis, evaluation, and critique of the algorithm and your implementation. Include a description of the testing data you used and a discussion of examples that illustrate major features of your system. Testing is a critical part of system construction, and the scope of your testing will be an important component in our evaluation. Discuss what you learned from the implementation.

5.1 Results

For algorithm-comparison projects: a section reporting empirical comparison results preferably presented graphically.

6 Discussion

Summary of approach and results. Major takeaways? Things you could improve in future work?

A System Description

Appendix 1 A clear description of how to use your system and how to generate the output you discussed in the write-up. *The teaching staff must be able to run your system.*

B Group Makeup

Appendix 2 A list of each project participant and that participants contributions to the project. If the division of work varies significantly from the project proposal, provide a brief explanation. Your code should be clearly documented.

References

[1] Sepp Hochreiter and Jürgen Schmidhuber. Long short-term memory. *Neural computation*, 9(8):1735–1780, 1997.