

# Generating Startup Ideas with Markov Chains

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## 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

## 3 Related Work

For instance, [1].

## 4 Body 1

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.

## 5 Body 2

## 6 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.

### 6.1 Methods and Models

### 6.2 Results

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

### 6.3 Discussion

## A Program Trace

Appendix 1 A trace of the program showing how it handles key examples or some other demonstration of the program in action.

## B System Description

Appendix 2 A clear description of how to use your system and how to generate the output you discussed in the write-up and the example transcript in Appendix 1. N.B.: The teaching staff must be able to run your system.

## C Group Makeup

Appendix 3 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.