

# The Upgrade

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# Abstract

An choice is good/moral if an agent believes that the integral of the most probable wellbeing vs time function for a universe in which the action takes place is greater than a universe in which it does not. The aim of The Upgrade is to create a tool that will make more moral choices. The possibility of succeeding in this creation is low but increases with effort (dependent on person(s) passion for the project), time (dependent on occupation), expertise (also dependent on current occupation, effort, and time), and help (dependent on ability to sell current moral system and justifications for project to others). The possibility of the creation to achieve that aim is incalculable. However, as humans generally achieve or attempt to achieve this aim, if the tool learns similarly to humans and surpasses their abilities, that trend should continue.

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# Chapter 1

## Introduction

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## **1.1 Moral systems**

### **1.1.1 Majority moral opinion**

COMPARISON OF POLLING DATA FOR MORALS METAETHICAL JUSTIFICATION FOR BELIEFS METAETHICAL EVALUATION OF MORAL SYSTEMS AN APPEAL TO THE UPGRADE FOR ALIGNING WITH THE PREFERENCES OF PEOPLES MORAL SYSTEMS USE THE COMPARISONS TO FIND A CONSENSUS MORAL OPINION (LAWS ETC)

### **1.1.2 How morality changes over time**

TIME DEPENDANT MORAL GRAPHS AXIOM PCA PLOT

## **1.2 The aims of the upgrade**

### **1.2.1 Core principles**

### **1.2.2 How the upgrade aligns with current moral beliefs**

### **1.2.3 Previous attempts to achieve these ends**

NUMENTA (Numenta, n.d.), ALPHA GO, ETC

## **1.3 AI safety and responsibility**

THE ASSURANCE OF ALIGNMENT OF THE UPGRADE WITH CONSENSUS CORE MORAL BELIEFS.

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## 1.4 Probability of The Upgrade to succeed

FACTORS THAT AFFECT THIS PROBABILITY TO SUCCEED PASSION  
TIME EXPERTISE MANPOWER JUSTIFY THE WRITING OF THIS MAN-  
UAL

## 1.5 Chapter abstracts

### **Running The Upgrade**

In this chapter, an explanation and justification of software for The Upgrade is given

### **Bitarray datastreams**

In this chapter, the conversion of external data to a stream of binary data is discussed.

### **Combinations**

In this chapter, implementation and benefits of conversion of the bitarray datastream into a combinatoric matrix are discussed.

### **Memory**

In this chapter, a method to persist the activation of elements of the combinatoric matrix is proposed.

### **Action**

In this chapter, the random-pianist method of bitarray datastream output is described.



# Chapter 2

## Bitarray datastreams

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### 2.1 Chapter introduction

### 2.2 Sources of data for The Upgrade

### 2.3 Binary conversion

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### 2.5 Time resolution

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# Chapter 3

## Combinations

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## **3.1 Chapter introduction**

### **3.1.1 Classical combinatorics**

### **3.1.2 The problem of scale**

## **3.2 The combinations array**

## **3.3 Slicing the combinations array**

SCALE ADJUSTMENT TIME ADJUSTMENT SKEW ADJUSTMENT

### **3.3.1 Combinations of combinations**

PAIR FINDING SET THEORY PROBABILITIES OF PROBABILITIES

## **3.4 Chapter summary**

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## Memory

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### 4.1 Chapter introduction

### 4.2 Persistence of activation

### 4.3 Delay function

### 4.4 Transfer and Storage

### 4.5 Summary

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## Action

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### 5.1 Chapter introduction

### 5.2 The random-pianist method

### 5.3 Summary

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# Chapter 6

## Conclusion

### 6.1 Chapter introduction

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# References

Numenta, N. H. (n.d.). *Home page, numenta inc, 2007.*

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# Acknowledgements

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