# Finding Adam

# Advancing Reasoning in Artificial Intelligence as a Potential Step towards Artificial General Superintelligence

## A Doctoral Thesis

Abhinav Madahar o अभिनव ਮਦਾਹਰ Department of Computer Science University of TBD

abhinav madahar @tbd.edu

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(Land Acknowledgement based on the university which I attend)

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Dedicated to the giants on whose shoulders I stand.

### CHAPTER I

## Introduction

ABSTRACT. This is the introduction.

(Placeholder for epigraph)

(Placeholder for epigraph)

Author 1

Author 2

## CHAPTER II

# History

4 II. HISTORY

## 1. The History of Progress

2. The History of Conceptualizations of Change and Progress

6 II. HISTORY

#### 3. The History of Decelerationism

4. The History of Scientific Research and Progress in Artificial Intelligence

8 II. HISTORY

5. The History of Conceptualizations of Artificial Intelligence

 ${\bf 6.}\ {\bf Historicizing}\ {\bf Deceleration ism}\ {\bf in}\ {\bf Artificial}\ {\bf Intelligence}$ 

## CHAPTER III

# What Are Intelligence and Consciousness?

#### 7. What Is Intelligence?

#### 8. What Is Consciousness?

9. What Is the Relationship between Intelligence and Language?

10. What Is the Relationship between Intelligence and Consciousness?

11. Does There Exist a Meaningful Notion of Superintelligence?

12. IS THERE A QUALITATIVE OR MERELY A QUANTITATIVE DIFFERENCE BETWEEN ARTIFICIAL GENERAL INTELLIGENCE AND ARTIFICIAL GENERAL

12. Is There a Qualitative or Merely a Quantitative Difference between Artificial General Intelligence and Artificial General Superintelligence?

## CHAPTER IV

# Advancing Reasoning in Artificial Intelligence

#### 13. Chain-of-Thought Reasoning

- 13.1. Understanding the Mechanism through which Chain-of-Thought Reasoning Works.
- $13.2.\$  Improving Chain-of-Thought Reasoning using Reinforcement Learning from Human Feedback.

## CHAPTER V

# How Advancing Reasoning in Artificial Intelligence Can Achieve Artificial General Superintelligence

## CHAPTER VI

# **Ethical Matters**

#### 14. Ethical Downsides

- 14.1. Job Losses.
- 14.2. Malicious Use of Artificial General Superintelligence.
- 14.3. Misalignment of Artificial General Superintelligence.

#### 15. Ethical Upsides

- 15.1. Increases in Total Factor Productivity.
- 15.2. Answering Scientific and Academic Questions which Humans Struggle to Answer.
  - 15.3. Post-scarcity.

#### 16. Effective Accelerationism

17. ALIGNMENT 27

#### 17. Alignment

## CHAPTER VII

# Conclusion