Finding Adam

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

A Doctoral Thesis

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Contents

| Land Acknowledgement | iv |
|--|---------------------|
| Dedication | v |
| Chapter I. Introduction | 1 |
| Chapter II. History | 3 |
| 1. The History of Progress | 4 |
| 2. The History of Conceptualizations of Change and Progress | 5 |
| 3. The History of Decelerationism | 6 |
| 4. The History of Scientific Research and Progress in Artificial Intelligence | 7 |
| 5. The History of Conceptualizations of Artificial Intelligence | 8 |
| 6. Historicizing Decelerationism in Artificial Intelligence | 9 |
| Chapter III. What Are Intelligence and Consciousness? | 11 |
| 7. What Is Intelligence? | 12 |
| 8. What Is Consciousness? | 13 |
| 9. What Is the Relationship between Intelligence and Language? | 14 |
| 10. What Is the Relationship between Intelligence and Consciousness? | 15 |
| 11. Does There Exist a Meaningful Notion of Superintelligence? | 16 |
| 12. Is There a Qualitative or Merely a Quantitative Difference between Artificial General Inte | lligence |
| and Artificial General Superintelligence? | 17 |
| Chapter IV. Advancing Reasoning in Artificial Intelligence | 19 |
| 13. Chain-of-Thought Reasoning | 20 |
| 13.1. Understanding the Mechanism through which Chain-of-Thought Reasoning Works | 20 |
| 13.2. Improving Chain-of-Thought Reasoning using Reinforcement Learning from Human | |
| Feedback | 20 |
| Chapter V. How Advancing Reasoning in Artificial Intelligence Can Achieve Artificial General S | uperintelligence 21 |
| Chapter VI. Ethical Matters | 23 |
| 14. Ethical Downsides | 24 |
| 14.1. Job Losses | 24 |
| 14.2. Malicious Use of Artificial General Superintelligence | 24 |
| 14.3. Misalignment of Artificial General Superintelligence | 24 |
| 15. Ethical Upsides | 25 |
| 15.1. Increases in Total Factor Productivity | 25 |
| 15.2. Answering Scientific and Academic Questions which Humans Struggle to Answer | 25 |

| iv | | CONTENTS |
|----|--|----------|
| | | |

| 15.3. Post-scarcity | 2ξ |
|-------------------------------|--------|
| 16. Effective Accelerationism | 26 |
| 17. Alignment | 27 |
| Chapter VII. Conclusion | 29 |

CONTENTS

(Land Acknowledgement based on the university which I attend)

vi CONTENTS

Dedicated to the giants on whose shoulders I stand.

CHAPTER I

Introduction

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 ${\rm (Placeholder\ for\ epigraph)}^{\quad \ Author\ 1}$

Author 2

1

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