

My suggested path to AGI

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1 Preface

This article is a way for me to share what I think is a better way to go through the content I've gone through in order to learn AGI, which you can read at [my path to AGI](#).

If you have comments and suggestions, feel free to let me know through the comments!

2 Prerequisites

In this section, I list all the topics that generally serves as foundation for more advanced topics. It is not necessary to go through all of the prerequisites, but it will definitely improve your odds of understanding more complex theories down the road. Furthermore, they will provide you with useful tools and abstractions.

2.1 Linear algebra

No book suggestion yet.

2.2 Discrete mathematics

- [Discrete Mathematics and Its Applications](#)

2.3 Logic

- [A Concise Introduction to Logic](#)

2.4 Set theory

- [Naive Set Theory](#)

2.5 Calculus

2.5.1 Differential

No book suggestion yet.

2.5.2 Integral

No book suggestion yet.

2.5.3 Vector

No book suggestion yet.

2.5.4 Multivariable

No book suggestion yet.

2.6 Programming

No book suggestion yet.

As most scientific programming is done in Python nowadays (2015-2017), it is highly suggested to get familiar with the language.

3 Reading list

3.1 Introduction

- Artificial Intelligence: A Modern Approach
- The Society of Mind
- The Essential Turing (everything except *On Computable Numbers, with an Application to the Entscheidungsproblem* and *Systems of Logic Based on Ordinals*)
- Cognitive Science: An Introduction to the Science of the Mind
- How to Solve It: A New Aspect of Mathematical Method
- A Collection of Definitions of Intelligence
- On Intelligence
- Essentials of General Intelligence: The Direct Path to Artificial General Intelligence
- Artificial Brains

3.2 Intermediate

- The Logic of Intelligence
- AM: An Artificial Intelligence Approach to Discovery in Mathematics as Heuristic Search
- From Seed AI to Technological Singularity via Recursively Self-Improving Software
- Can Intelligence Explode?
- A Complete Theory of Everything (will be subjective)
- Self-improving AI: an Analysis

3.3 Advanced

- Machine Super Intelligence
- The New AI: General & Sound & Relevant for Physics
- Gödel Machines: Fully Self-Referential Optimal Universal Self-improvers
- Universal Artificial Intelligence
- The Essential Turing (*On Computable Numbers, with an Application to the Entscheidungsproblem* and *Systems of Logic Based on Ordinals*)
- Neuroscience: Exploring the Brain
- Introduction to Automata Theory, Languages, and Computation
- Language Identification in the Limit
- Reinforcement Learning
- Deep Learning
- Theory of self-reproducing automata
- Neural Turing Machines
- A Mathematical Theory of Communication