

# AI Poker Tutorial

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# Home

AI Poker Camp Beta Course Materials

Visit <https://poker.camp> for info on the course

# **Part I**

## **Games**

# **1 Expected Value Example: Poker**

## **1.1 Section 1**

## **1.2 Section 2**

### **1.2.1 Section 2.1**

### **1.2.2 Section 2.2**

## **1.3 Section 3**

### **1.3.1 Section 3.1**

### **1.3.2 Section 3.2**

### **1.3.3 Section 3.3**

## **1.4 Section 4**

## 2 Kuhn Poker

This is the CFR page

$$E = mc^2$$

## 3 Blackjack

This is the CFR page

$$E = mc^2$$



## 4 Tic Tac Toe

This is the CFR page

$$E = mc^2$$

## 5 Leduc Poker

This is the CFR page

$$E = mc^2$$

## 6 Rock Paper Scissors

This is the CFR page

$$E = mc^2$$

## 7 Texas Hold'em

This is the CFR page

$$E = mc^2$$

## 8 Texas Tac Toe

This is the CFR page

$$E = mc^2$$

## 9 Rock Poker Scissors

This is the CFR page

$$E = mc^2$$

**Part II**

**Game Theory**

## 10 Best Response

This is a book created from markdown and executable code.

See Knuth (1984) for additional discussion of literate programming.



# 11 Game Theory Foundations

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See Knuth (1984) for additional discussion of literate programming.

## 12 Best Response

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See Knuth (1984) for additional discussion of literate programming.

# 13 Game Trees

This is the CFR page

$$E = mc^2$$

# **Part III**

## **Reinforcement Learning**

# 14 Bandits

This is the CFR page

$$E = mc^2$$

# 15 Monte Carlo Methods

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# 16 Reinforcement Learning

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**Part IV**

**Optimal Strategies**



# 17 Kuhn Poker CFR

This is the CFR page

$$E = mc^2$$

## 18 CFR (Counterfactual Regret Minimization)

This is the Kuhn Poker page

## 19 MCCFR (Monte Carlo CFR)

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**Part V**

**Exploitative Strategies**

## 20 Best Response

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## 21 Opponent Modeling

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## **Part VI**

# **Abstracting Large Games**

## 22 Card Abstractions

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## 23 Bet Abstractions

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## **Part VII**

# **Setup**

## 24 Intro to Poker Camp

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## 25 Poker Camp Servers

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See Knuth (1984) for additional discussion of literate programming.

## 26 Agents

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See Knuth (1984) for additional discussion of literate programming.

Knuth, Donald E. 1984. “Literate Programming.” *Comput. J.* 27 (2): 97–111. <https://doi.org/10.1093/comjnl/27.2.97>.