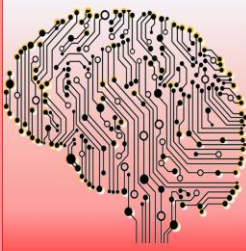


TECH CHESS



13 **ARTIFICIAL INTELLIGENCE** **K**

1943 Walter Pitts & Warren McCulloch



Neural networks as artificial neurons to perform logical functions described.

Cogitate – Reveal the top card of the deck. Draw it or *replace* a

2021

13 **SOCIAL MEDIA** **K**

1997 Andrew Weinreich




Six Degrees profile uploading service founded.

Rally – All players draw a card.

Benjamin

13 **PEER-TO-PEER SERVICES** **K**

1999 Shawn Fanning & Sean Parker



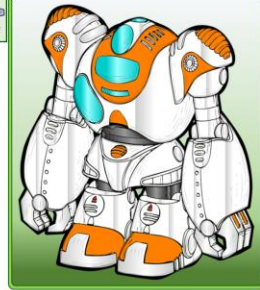
Napster for P2P file sharing debuts.

Assist – You may draw a card. All players give you a card. Then, give each player a card from your hand.

Benjamin Cheung

13 **ROBOTICS** **K**

1920 Karel Capek



The play Rossum's Universal Robots (R.U.R.) created.

Automate – Exchange a neutral card in play or a card you control with the top card of the deck or card in the discard.

Benjamin Cheung

Ben Cheung, PhD



60-90 min



2

NUMBER OF PLAYERS 2
TIME TO PLAY 60-90 min



7+

AGES 7+
COMPONENTS 54 cards (The Tech Deck)

RULES VERSION 4 / Feb 13, 2022

THE TECH DECK

Playing cards were created in China in the 9th Century with printing. In 1370, cards came to Europe from Mamluk, Egypt. By 1377, the French used cards with Hearts, Tiles (diamonds), Clovers (clubs) and Pikes (spades). The Tech Deck introduces a modern version of classic playing cards bringing them into the 21st century. The Tech Deck supports any game you could play with classic playing cards and introduces card effects to spice up any game. It is a game platform.

THE DOMAINS (SUITS) OF THE TECH DECK

There are 4 domains (suits) in the DECK:



KNOWLEDGE (BOOK) INFORMATION TECHNOLOGIES

Knowledge is facts and information accumulated by science. It is the theoretical and practical understanding of a subject foundational to science and technology.



SCIENCE (BEAKER) RESEARCH & DEVELOPMENT

Science is organized knowledge with testable explanations. The natural sciences (biology, chemistry, and physics) study nature. The social sciences (economics, psychology, and sociology) focuses on societies. The formal sciences (logic, mathematics, and computer science) develop abstract concepts.



TECHNOLOGY (GEAR) INDUSTRY, MANUFACTURING

Technology is the application of scientific knowledge for practical purposes. Engineering is the creative application of science and math to the design and construction of machines, systems, and processes.



SERVICES (GLOBE) NON-GOODS INDUSTRIES, PUBLIC & PROFESSIONAL SERVICES

Services are the integration of knowledge, science and technology to create products to benefit consumers. Service industries include communications, retailing, professional services, and government services.

CHESS – INTRODUCTION

Chaturanga was the precursor of chess originating in India in the 7th century CE. *Chaturanga* translates to “four divisions of the military”: cavalry, chariotry, elephantry, and infantry. Then, chess spread from the Middle East to Russia. By 1,000 CE, chess had spread throughout all Europe. As chess spread throughout the world, many variants emerged. In China, it evolved to Xiang Qi; in Thailand Makruk; in the Arab world Shatranj; and in Japan Shogi.

GAME SETUP

- 1 **DETERMINE A FIRST PLAYER** – Randomly determine a first player.
- 2 **REMOVE THE WILD CARDS** – *Expel* (remove) both the wild cards from the Tech Deck.
- 3 **SETUP THE PLAY BOARD** – The first player takes the 1, 2, 3, 4, 11, 12 and 13 of both the Service and Science cards. He controls the Service and Science domain cards. The first player selects one of the 11 cards in either the Service or Science domain and repeats for the 12 value cards. The second player does the same using the Knowledge and Technology cards. The second player controls the Knowledge and Technology domains. The first player places the 1, 13, 12, 11, 13, 1 pieces (represented by cards) in their first rank arranged in that numerical order. They place the 2, 3, 4, 4, 3, 2 in their second rank in that order. The second player places the 1, 13, 11, 12, 13, 1 pieces on their first rank. Their second rank is like the first player. The domain order of their value 1, 2, 3, 4, and 13 cards can be selected by the owning player. For example, the 13-technology and 13-knowledge can be in either the 2nd or 5th position on the first rank. Both players share a 6 x 6 board. There are two empty rows between the players. You may use either the printed board (provided) or use other face-down playing cards or index cards for the empty positions on the board.
- 4 **DECK & DISCARD** – Shuffle the remaining cards to form a deck placed next to the board. The discard pile is next to it.
- 5 **DEAL CARDS TO PLAYERS** – Deal 3 cards to each player from the draw deck.

ACTIONS ON A PLAYER TURN (SUMMARY)

On a player's turn, they perform one of the following actions:

MOVE A PIECE – The player may move one of their pieces. If he captures an opposing piece, he may use the card ability on the piece (card) that made the capture. Put the captured piece into the discard pile. If you capture a king, expel it.

USE A CARD EFFECTS – A player may use a card ability from a card in their hand. Discard that card after use.

UPGRADE A PIECE – Twice per game, a player may upgrade one of his 2, 3, or 4 value figures (cards) on the board with any non-13 value card from his hand matching his domains by exchanging those cards. Track with tokens or chips.

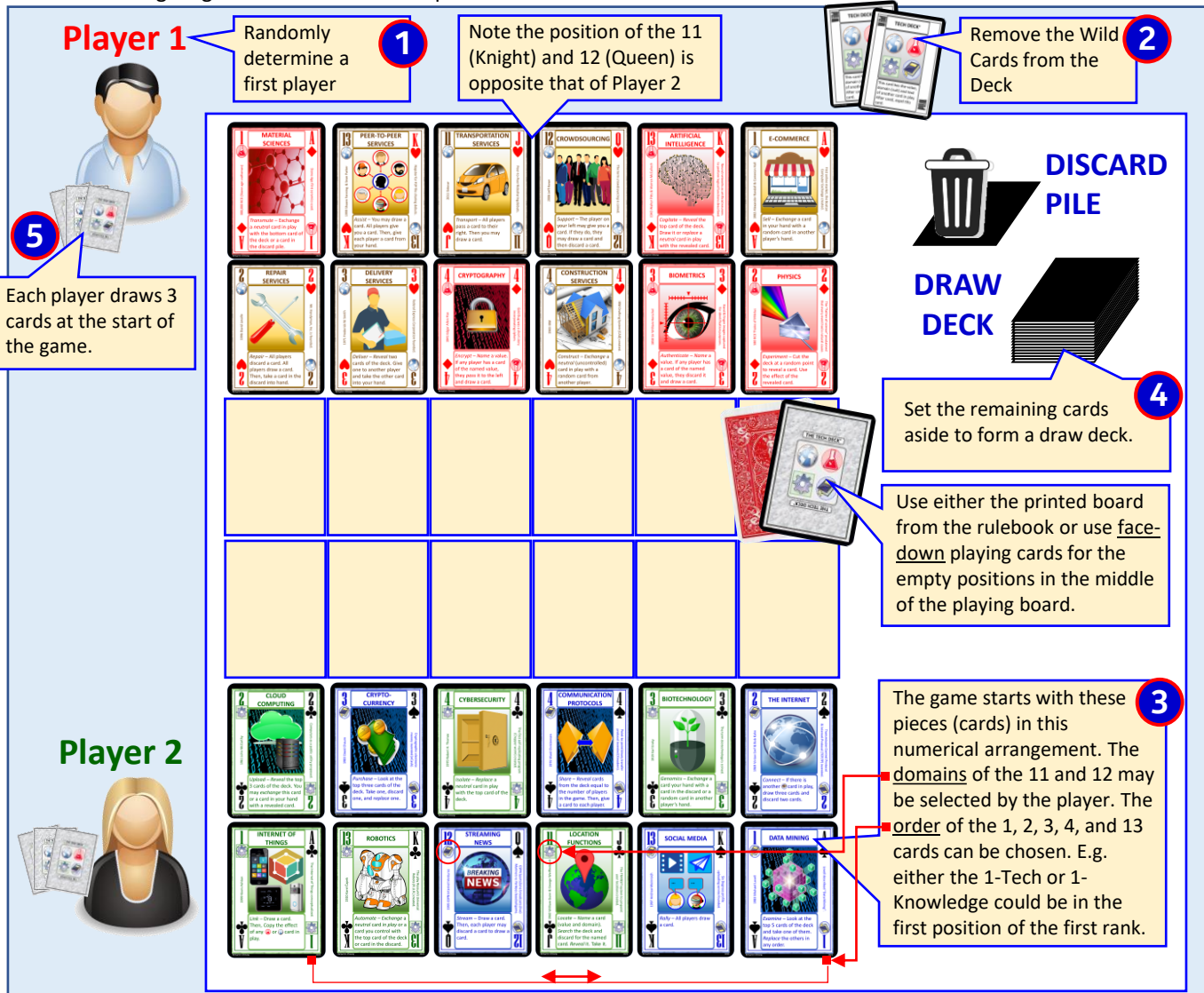
BUILD A PIECE – Three times per game, a player may build a pawn of value 2-10 on their first or second row of one of their domains from their hand onto the board.

WINNING THE GAME

WINNING THE GAME – If a player has captured both Kings of his opponent, he wins the game. If each player has only one King left and no other pieces, the game ends in a draw. Stalemate occurs when a player cannot make a legal move.

TECH CHESS GAME SETUP

The following diagram illustrates the setup for Tech Chess:



MOVING A PIECE

MOVING A PIECE – On their turn, a player may move one of their pieces (cards). The 1, 11, and 12 move like a rook, knight, and queen in chess, respectively. While the 2-10 are pawns, they move with more freedom than chess pawns. The knights (11-value cards) are the only pieces that can jump over intervening pieces while moving. Remember the ditty “Jumping jacks leap like knights”.

VALUE	NAME	MOVEMENT RULES
2-10	Pawn	Moves forward, diagonally, or laterally 1 space. Value 2-4 pawns are upgradable.
1	Rook	Moves vertically or horizontally any number of spaces.
11	Knight	Moves two squares vertically and one square horizontally, or two squares horizontally and one square vertically (with both forming the shape of an L). It can jump pieces.
12	Queen	Moves vertically, horizontally, or diagonally any number of spaces.
13	King	Moves vertically, horizontally, or diagonally one or two spaces.

CAPTURING A PIECE – If you move your piece into the same position (space) as an opposing piece you capture it. Remove the captured piece from the board and place it in the discard pile. If you capture a King, *expe!* instead. You may use the card ability on the card of your capturing piece.

TECH CHESS FIGURE MOVEMENT DIAGRAMS

The following diagram illustrates how the pieces move in Tech Chess:

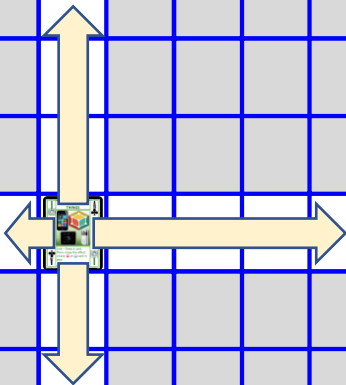
#2-#10 cards

Value 2 through value 10 cards are **pawns** that move and capture laterally (left/right) one position (space) or forward one position. They cannot move backwards.



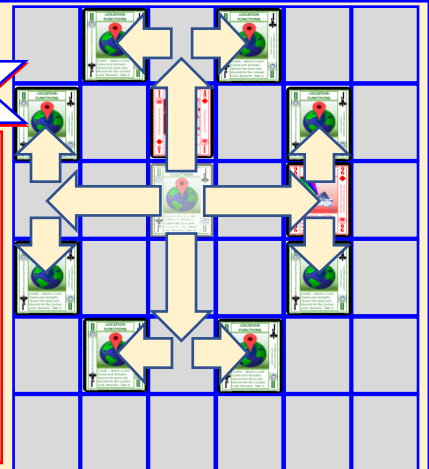
Value 1 cards

Value 1 cards are **rooks** that move and capture like rooks in chess. They can move orthogonally (horizontally or vertically) any number of positions (spaces).



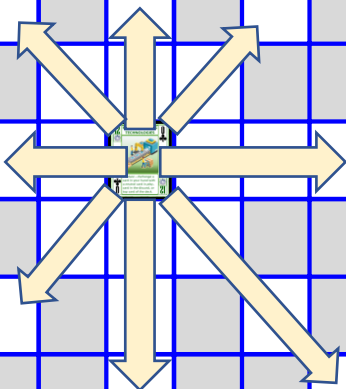
Value 11 cards

Value 11 cards move like **knights**. "Jumping Jacks leap like knights" moving two squares vertically and one square horizontally, or two squares horizontally and one square vertically (with both forming the shape of an L).



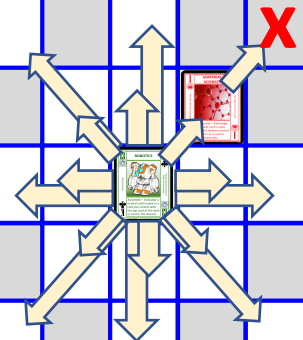
Value 12 cards

Value 12 cards are **queens** that move and capture like queens in chess. They can move orthogonally or diagonally any number of positions (spaces).



Value 13 cards

Value 13 cards are **kings** that move one or two squares orthogonally (horizontally or vertically) or diagonally. But may not pass-through other figures.



USING CARD EFFECTS

USING CARD EFFECTS – To use a card ability, a player *reveals* the card and resolves the game effect on it. After resolving the effect, discard the card that was used.

DECK RUNNING OUT OF CARDS – If the deck runs out of cards, or a player needs to reveal more cards than are in the deck, resolve as much as possible. Then, shuffle the discard into the deck and perform the rest of the effect. For example, to reveal 4 cards in a deck with only 2 cards, reveal the 2 cards. Shuffle the discard to create a new deck. Then, reveal an additional 2 cards. If there are still not enough cards in the deck to reveal the requested number of cards reveal as many as possible.

CORNER CASES – If a game effect has multiple effects, but any of them are unresolvable, do as much as possible. Tech chess has no *neutral* cards. Player pieces are all *controlled* and *in play*. Game effects last until the end of the turn if not specified on the card. It is possible that a game card effect will be used again because of a copy effect. Whenever an effect causes “all players” to do something, the active player starts first. Then, the effect passes to the other player. 13-value cards (Kings) may not be *exchanged* or *replaced* by a game effect.

UPGRADING A PIECE (CARD)

UPGRADE A PIECE – Twice per game, a player may use his turn to upgrade one of his 2, 3, or 4-value figures (cards) on the board with any non-13 (king) value card from his hand. The player exchanges a non-13 card in their hand with the 2, 3, or 4-value card on the board matching the domains they control. Player 1 controls the Service and Science domains. Player 2 controls the Knowledge and Technology domains. You may **NOT** upgrade a piece to a king (13-value). After you upgrade a piece, play then passes to the other player. A player may track the number of upgrades they have performed using counters, tokens, or poker chips.

GAME EFFECTS – The 9-Service (Professional Services), 7-Science (Earth Sciences), and 13-Technology (Robotics) have game effects that can exchange cards in play (pieces) for other cards. These card game effects emulate upgrading piece. However, they do not count against the twice per game limit.

TECH CHESS UPGRADING PIECE EXAMPLE

Player 1

Player #1 can use his turn to upgrade an upgradeable pawn (value 2-4).

Player Hand

Player #1 can upgrade any of his value 2, 3, or 4 value cards with a card from his hand in his domains (Service and Science). He may **NOT** use the 7-knowledge since that is a Player #2 domain.

Player 1 wants to upgrade his 3-service in play with the 11-science from his hand. He exchanges the 3-service on the board with the 11-science in his hand. You may **NOT** upgrade a piece to a King (13 value).

BUILDING A PIECE (CARD)

BUILD A PIECE – Three times per game, a player may use their turn to build a pawn. A player can bring in a new piece into the game of card value 2-10 on any position on their back row (first rank) or second row. They place a pawn, a card of value 2-10, of one of their domains from their hand onto the board. After you build a piece, play then passes to the other player. A player may track the number of builds they have performed using counters, tokens, or poker chips. Note: it is possible to recover a previously captured 2, 3, or 4 value card (upgradable pawn) from the discard pile via card game effects, build it with an action, and then later upgrade it to a capital piece (1, 11, or 12 value piece).

WINNING THE GAME

WINNING THE GAME – If a player has captured both Kings (13-value card) of his opponent, he wins the game. If each player has only one King left and no other pieces, the game ends in a draw.

CHECKS and STALEMATE – When a King comes under fire, the attacker announces “*check*”. If the other player still has two kings in the game, they are not obligated to move their checked king on their next turn. However, if they only have one king left, they are. If you have two kings, it is also legal to move a King to a position where it might be captured. If a player has only one king left and their king is not under attack, but is unable to move, it is a *stalemate*.

GENERAL RULES

RESHUFFLE – If a game effect requires you to draw or reveal card(s) and there are not enough cards in the deck to do so, shuffle the discard pile with what is left of the deck to form a new deck.

LOOKING AT PILES – Any player may look through the discard. This is public information.

REVEALING – To reveal card(s), expose the card(s) for all to see. Then, returned them to where they came from, preserving their order. A player who *looks* at a card is the only person to see it and *may* divulge the information.

EXPELLING – A card that is expelled is permanently removed from the game.

EXCHANGING – Exchanging two cards causes them to swap places with each other. For example, exchanging a card from the top of the deck with a card in hand causes the two to change places with each other.

REPLACE – To replace a card, discard it and put the replacing card in its place.

REGULAR CARD GAMES & CHESS VARIANTS WITH THE TECH DECK

Poker and other card games can be played using the Tech Deck. The only extra rule is that each turn, a player may reveal a card from their hand and perform the effect specified on the card.

You can also try Chess Variants with Tech Chess. For example, *Bughouse* can be played using two Tech Decks. Two teams of two players play on two boards. Allies use opposite colors and give captured pieces to their partner.

STRATEGY TIPS FOR TECH CHESS

CHESS STRATEGY – Many of the concepts and strategies of Chess apply to Tech Chess such as material count, pawn structure, piece activity, space, king safety, and Zugzwang.


UPGRADING AND BUILDING – Deciding when to upgrade and build a piece can be vital to victory. Use card abilities to find good pieces (cards) from the draw deck or discard. This will allow you to make good upgrades and builds.

DOMAIN TYPE EFFECTS – The information-domain card effects typically relate to drawing, revealing and arranging cards. The science cards pertain to “tricks” that affect the game state or discard pile. The technology cards often have copy effects. The service cards focus on effects that relate to multiple players.

TERMS & DEFINITIONS

DISCARD – Discarded cards go to the discard.

DOMAIN – One of the four suits in the game (information, technology, science, services).

 (**Domain symbols**) – The four domain symbols are equivalent to suits.

EXCHANGING – Exchanging two cards causes two cards to swap places putting one where the other card was.

PICK – The act of selecting something. For example, a player or a card.

SUIT – A term used inter-changeably with domain. The traditional suits (club, heart, spade, diamond) are also printed on the cards in the Tech Deck to help you acclimate to domains.

FOR MORE INFORMATION

See the Boardgamegeek.com entry, Youtube.com (Walk-through videos), or visit cheung.interzone.com

OTHER GAMES WITH THE TECH DECK

Be sure to check out Tech Grid Poker, Tech City, and Tech Exchange which are other games designed to be used with the Tech Deck at BGG or my website.



CREDITS

Designer, Developer

Benjamin Cheung

Play Testers

Sherman D. Cheung, Steven O. Chew, Clifton Field, Kenji B. Kaneshiro, Rich Kopacz, Eugene

Ku, Vincent Mondaro, Lillian Mondaro, Pedro T. Ortiz, Henry K. Young

TECH CHESS 1-PAGE RULES SUMMARY



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CREDITS

Designer, Developer Benjamin Cheung
Play Testers Sherman D. Cheung, Steven O. Chew, Clifton Field, Kenji Kaneshiro, Rich Kopacz, Eugene Ku, Vincent Mondaro, Lillian Mondaro, Pedro T. Ortiz, Henry K. Young

Tech Chess Board-1

