



New Wave Terminology

A sample of hi-tech expressions with pop culture images

The Great Wave (1831)

The following simplified definitions represent an eclectic mix of artificial intelligence, robotics, and technology terms that have been paired with iconic television and movie images. The images were created by GenAI programs from photo “seeds” that are noted at the bottom of each page.

An AI glossary, timeline, and software directory are available on my Portland Community College faculty website:
<https://www.pcc.edu/staff/ric-stephens/>

Ric Stephens, June 4, 2024



5th Industrial Revolution (IR5)

A future where humans and machines collaborate closely, with a focus on human-centric technology and the ethical integration of artificial intelligence to enhance productivity and well-being.

Metropolis (1927)



AI anthropomorphism

Attributing human characteristics to programs and robots.

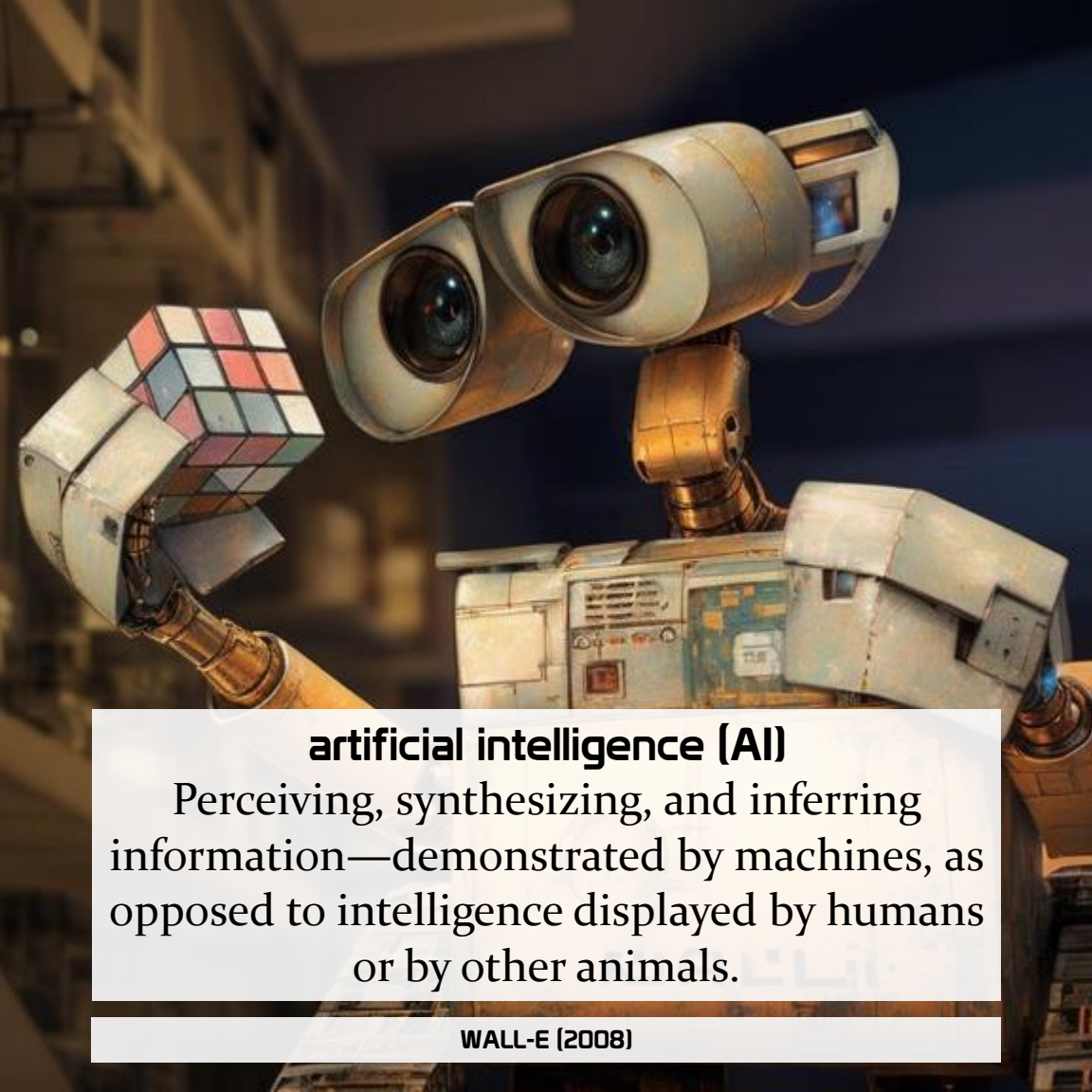
Knight Rider, KITT (1982)



android (droid)

A masculine humanoid robot.

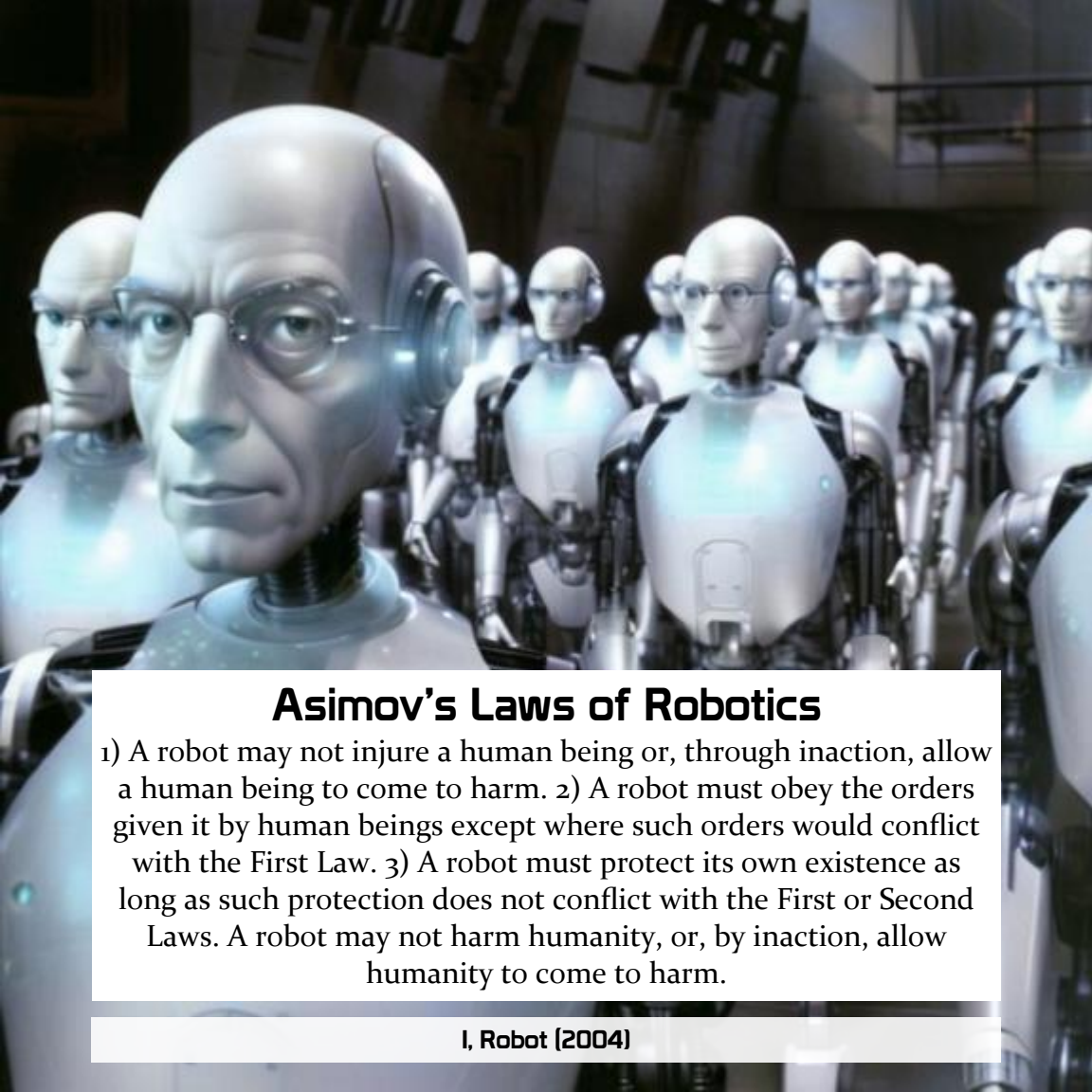
The Wizard of Oz, Tin Man (1939)



artificial intelligence (AI)

Perceiving, synthesizing, and inferring information—demonstrated by machines, as opposed to intelligence displayed by humans or by other animals.

WALL-E (2008)



Asimov's Laws of Robotics

1) A robot may not injure a human being or, through inaction, allow a human being to come to harm. 2) A robot must obey the orders given it by human beings except where such orders would conflict with the First Law. 3) A robot must protect its own existence as long as such protection does not conflict with the First or Second Laws. A robot may not harm humanity, or, by inaction, allow humanity to come to harm.



avatar

An icon or representation of a user in a shared virtual reality.

Star Trek, The Corbomite Maneuver (1966)



biomimetics (biomimicry)

The imitation of biological processes or models from nature.

Dune, ornithopter (2021)



brain-computer interface (BCI)

A direct communication pathway between the brain's electrical activity and an external device.

Johnny Mnemonic (1995)



chatbot

An AI that mimics human conversation through text or voice interactions, typically online.

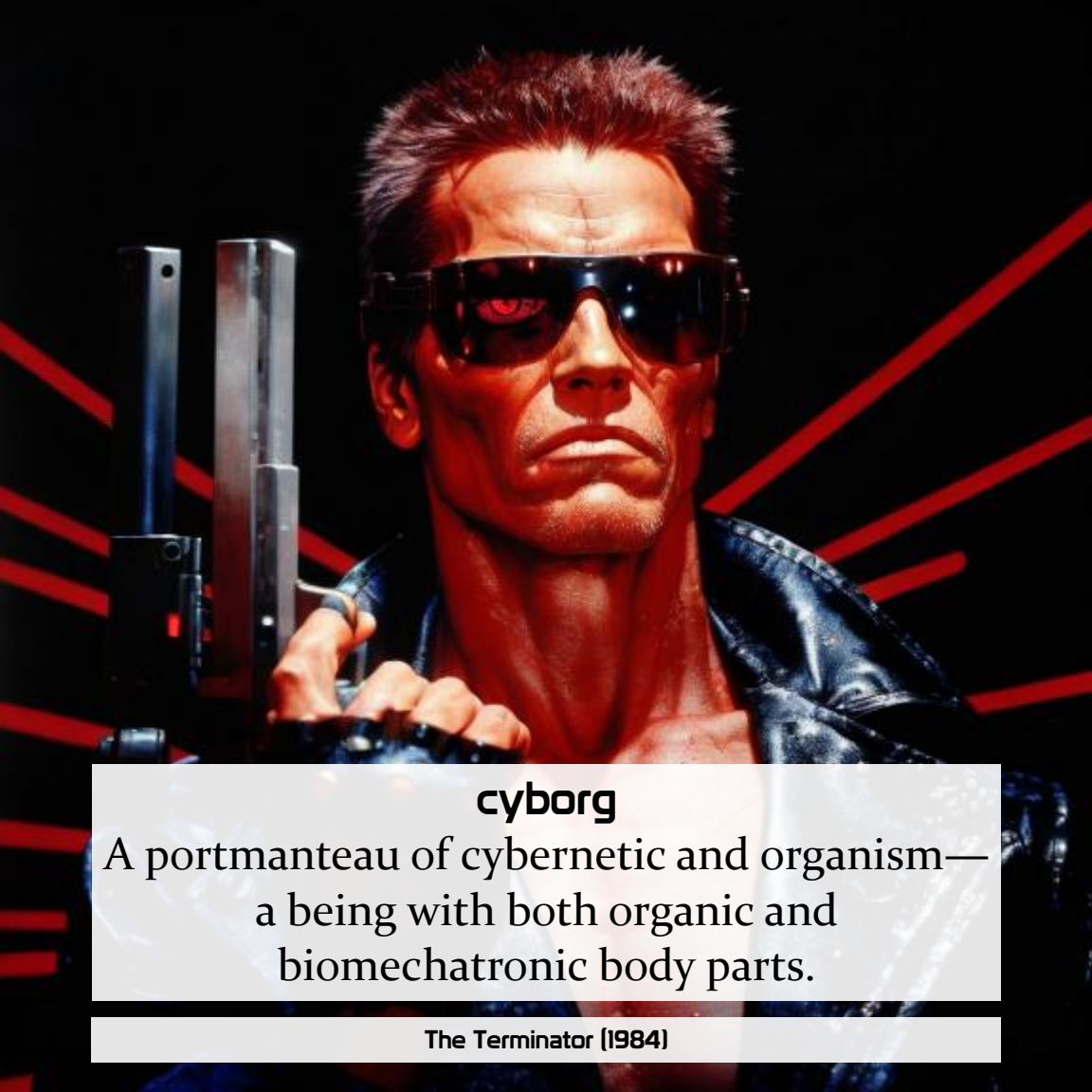
Her, OSI (2013)



cyberspace

A concept describing a widespread interconnected digital technology. It refers to the online world as a world ‘apart,’ as distinct from everyday reality.

The Matrix (1999)



cyborg

A portmanteau of cybernetic and organism—
a being with both organic and
biomechatronic body parts.

The Terminator (1984)



data privacy

The ability of individuals to control their personal information.

The Circle (2017)



deepfake

Audio and/or video of a person digitally altered so that they seem to be someone else, typically used maliciously or to spread false information.



Easter egg (wink)

A hidden element written into a program or placed on a website, article, or television show.



Ebert Test

A test that gauges whether an AI-generated voice can tell a joke with sufficient skill to cause people to laugh.

The Mr. Zed Show (1994)



extended reality (XR)

A catch-all term to refer to augmented reality, mixed reality, and virtual reality.

The Thirteenth Floor (1999)



FOOM

Fast Onset of Overwhelming Mastery. A sudden increase in artificial intelligence such that an AI system becomes extremely powerful.

Lucy (2014)



gamification

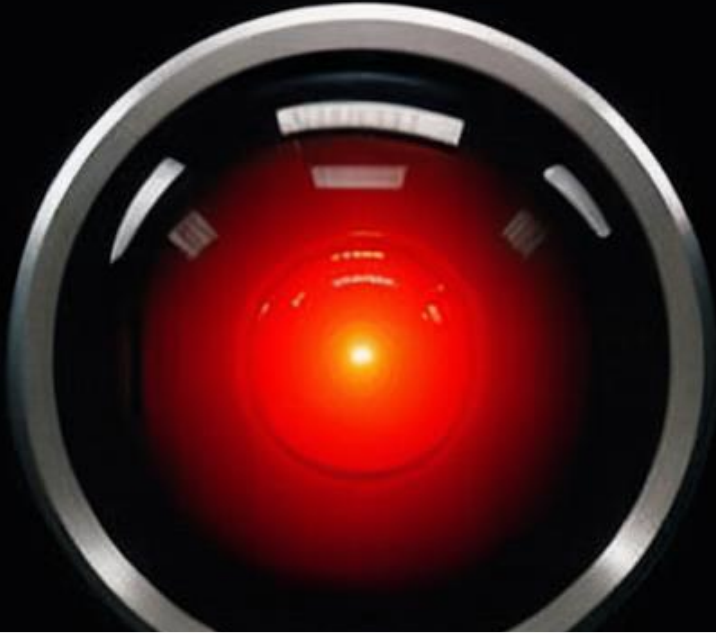
Applying typical elements of game playing to other areas of activity to encourage engagement with a product or service.

WarGames (1983)



gynoid (fembot)
A feminine humanoid robot.

My Living Doll, AF 709 (1964)



hallucination (confabulation, delusion)

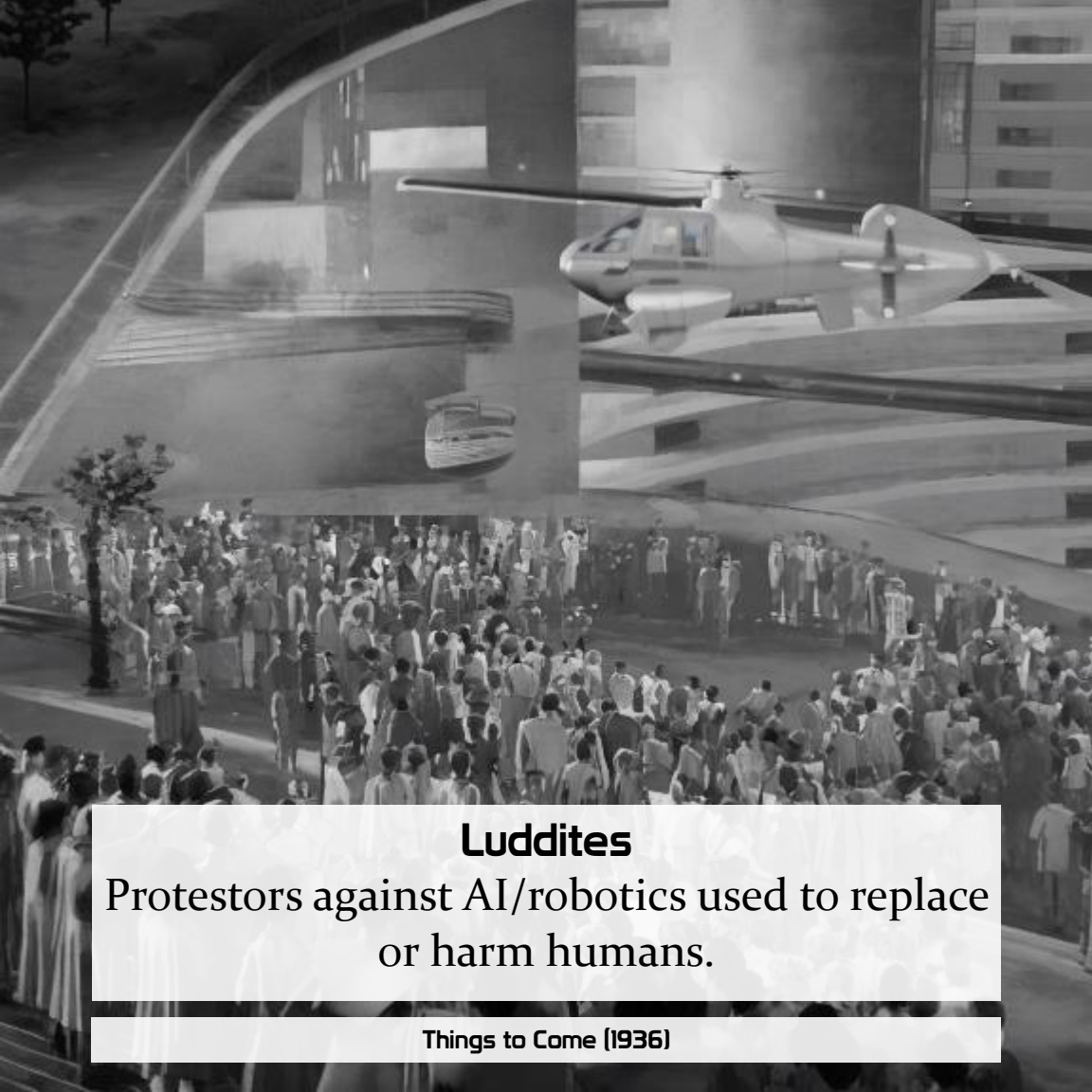
A confident response by an AI that does not seem to be justified by its training data, either because it is insufficient, biased, or too specialized.

2001: A Space Odyssey, HAL 9000 (1968)



IoT (the Internet of Things)

Physical objects with sensors, processing ability, software, and other technologies that connect and exchange data with other devices and systems over the Internet or other communications networks.



Luddites

Protestors against AI/robotics used to replace or harm humans.

Things to Come (1936)



nanobots

Molecular-sized robots measured on a nanoscale and programmed to accomplish a specific task within the human body.

Fantastic Voyage, Proteus (1966)



Paperclip Maximizer

The existential risk that an AI may pose to human beings were it to be successfully designed to pursue even seemingly harmless goals (e.g. manufacturing paperclips).

Star Trek: The Motion Picture, V'ger (1979)



pseudo AI

AI interfaces that have people working behind the scenes as fake chatbots.

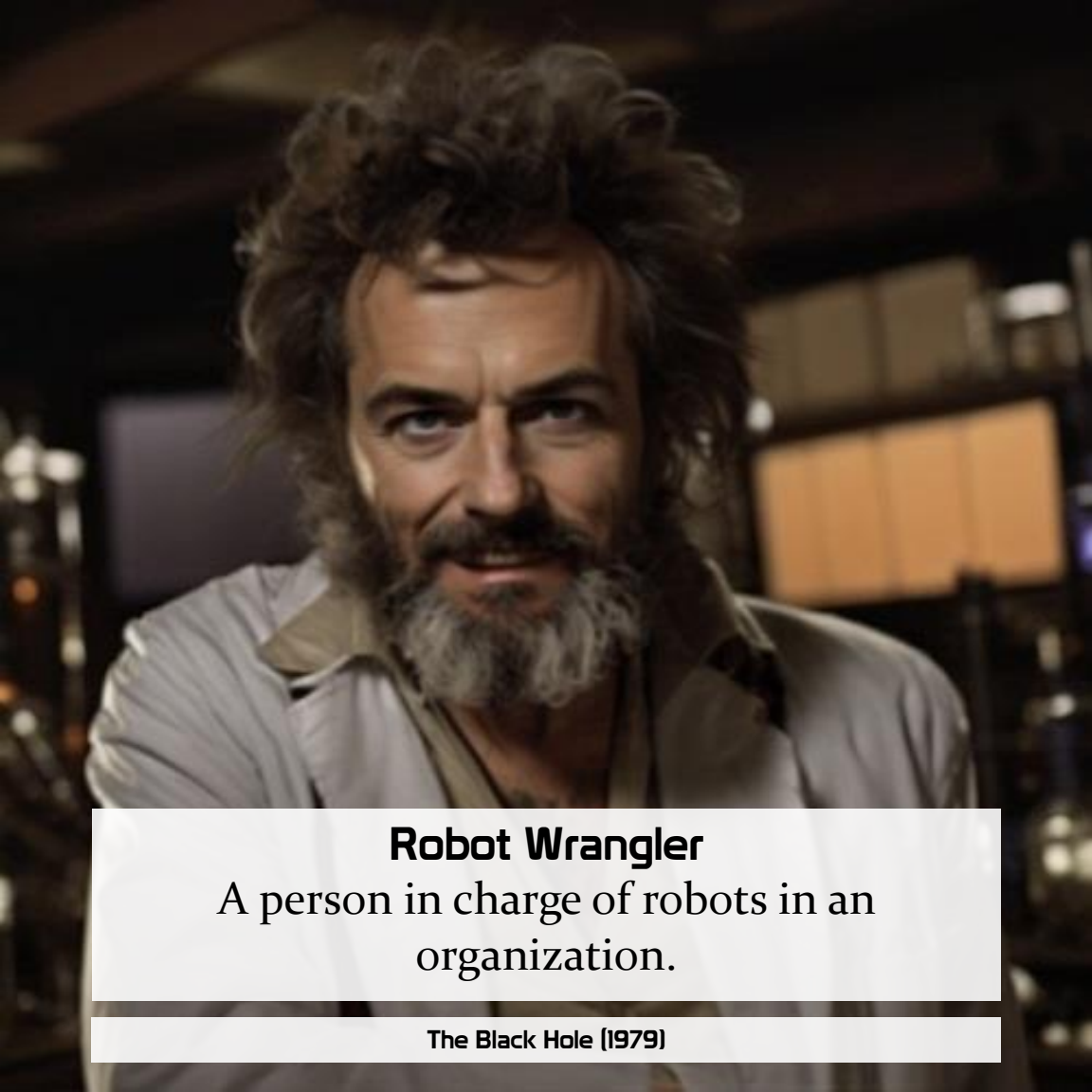
The Wizard of Oz (1939)



Robo-rama

An event or situation dominated by robotic or AI activities.

AI: Artificial Intelligence (2001)



Robot Wrangler

A person in charge of robots in an organization.

The Black Hole (1979)



Robo-sapiens

AI systems that are so advanced they seem almost human.

Ex Machina, Ava (2014)



smart city (technopolis)

A technologically modern urban area that uses different types of electronic methods and sensors to collect specific data used to improve operations across the city.

Logan's Run (1976)



Synthetic Sage

An AI system that provides remarkably wise and accurate advice.

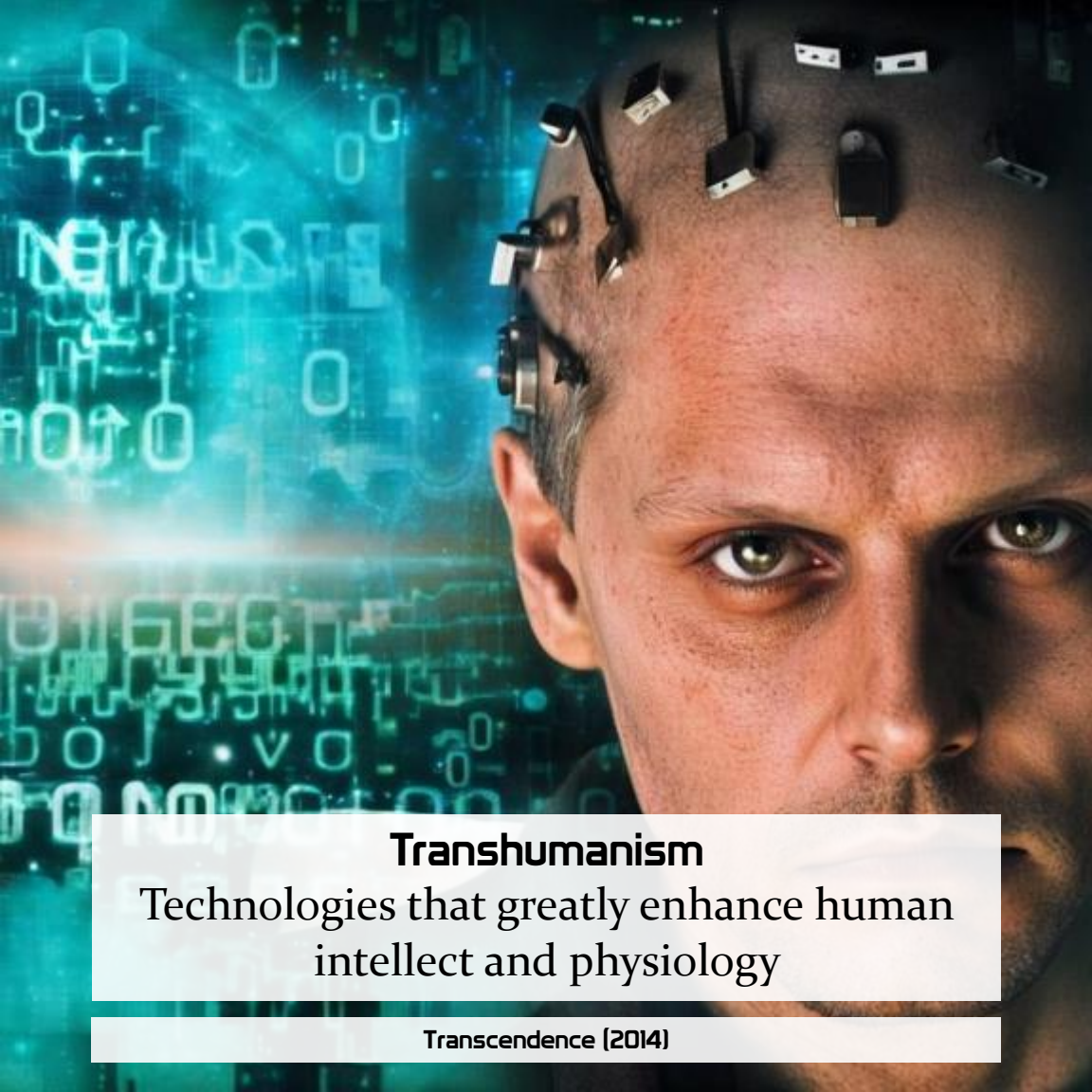
The Twilight Zone, The Old Man in the Cave (1963)



Technological Singularity

A hypothetical point in the future when technological growth becomes uncontrollable and irreversible, resulting in unfathomable changes to human civilization.

Westworld (2016)



Transhumanism

Technologies that greatly enhance human
intellect and physiology

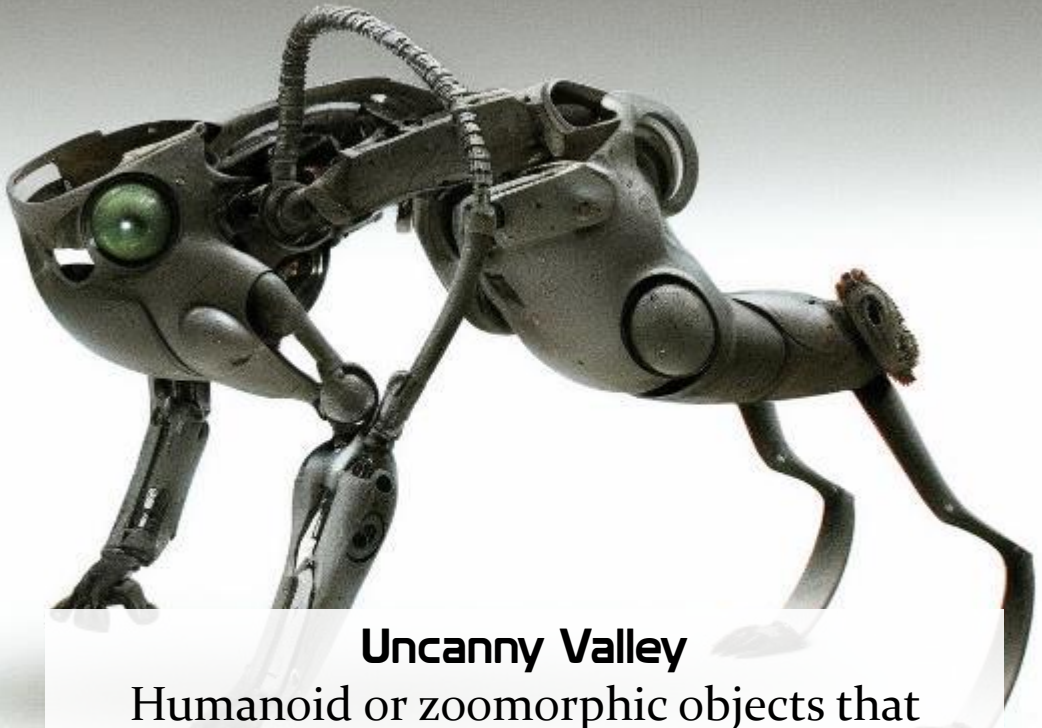
Transcendence (2014)



Turing Test

A test of a AI's ability to pass for a human, particularly in the fields of language and behavior.

Blade Runner, Voight-Kampff Test Machine (1982)



Uncanny Valley

Humanoid or zoomorphic objects that imperfectly resemble actual human beings or animals and provoke feelings of uneasiness and revulsion in observers.

War of the Worlds (2019)



uncrewed aerial vehicle (UAV)

An aircraft piloted by remote control or onboard computers.

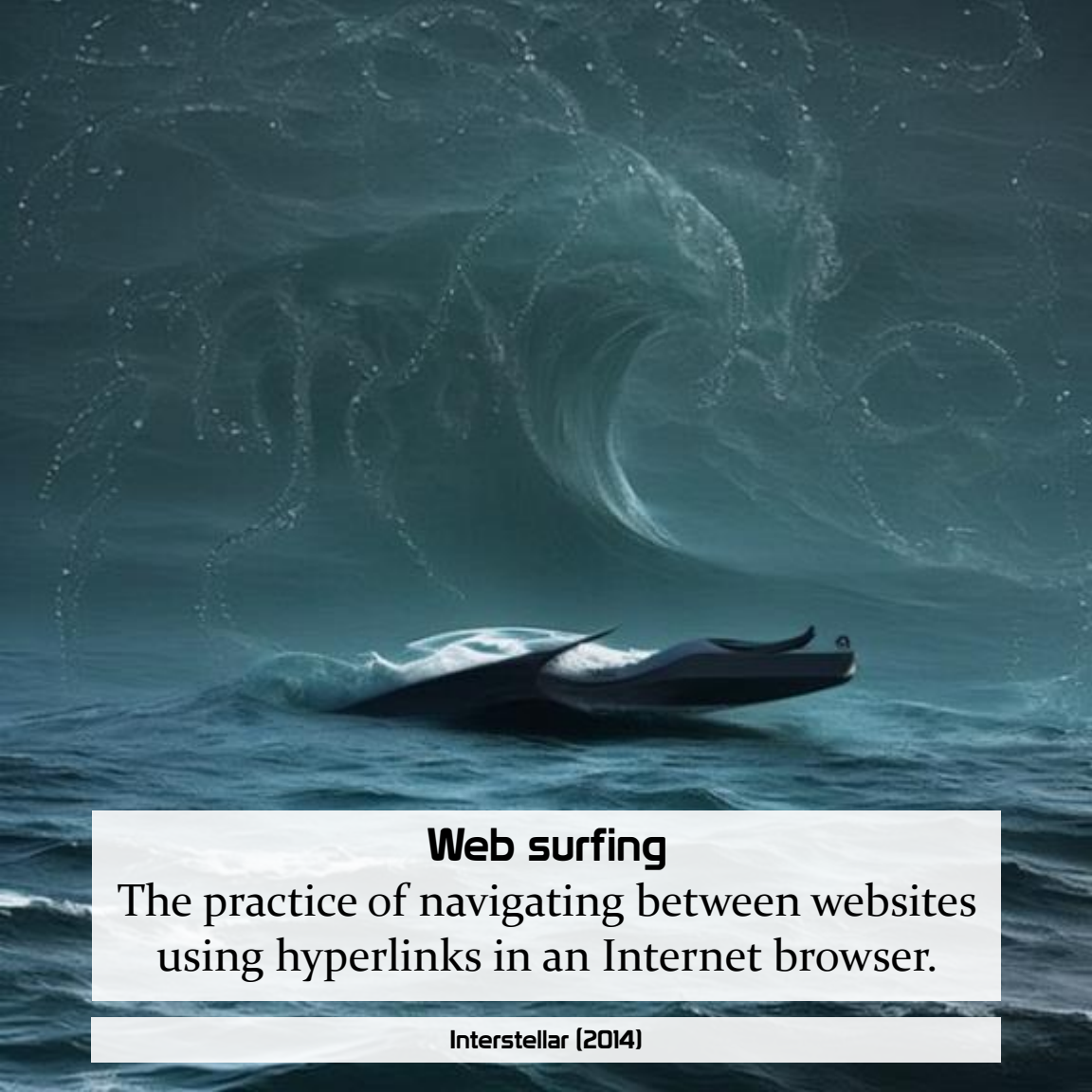
***batteries not included (1987)**



Web harvesting (scraping, extraction)

The process of using bots to extract content and data from a website.

Valerian and the City of a 1,000 Planets (2017)



Web surfing

The practice of navigating between websites using hyperlinks in an Internet browser.

Interstellar (2014)

End Of Line.