

Einführung in die künstliche Intelligenz

EKI08 – Ethische Aspekte der KI

Prof. Dr. A. del Pino

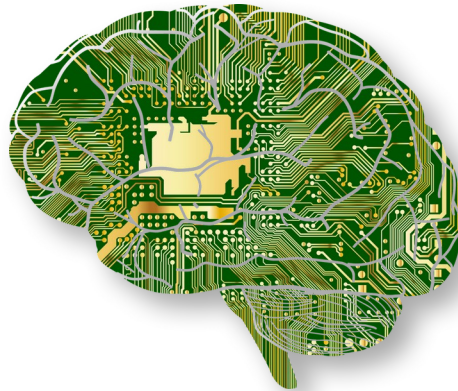


Bild: https://en.wikipedia.org/wiki/Machine_learning#/media/File:Anatomy-1751201_1280.png

Künstliche Intelligenz: Ein neuer Hype



Bild: <https://images-na.ssl-images-amazon.com/images/I/51SQF93553L.jpg>



Bild: <http://t0.gstatic.com/images?q=tbn:ANd9GcRF2gcOUBAPRf0hfnlfm5LisSNnDZmPrgMqVvg5nwwl8ma4o2c3>



Bild: <https://insidesources.com/i-robot-whats-next/>

Hype (Hyperbel, rhetorisches Stilmittel der Übertreibung)



Bild: https://en.wikipedia.org/wiki/Marvin_Minsky

“Within a generation... the problem of creating artificial intelligence will be substantially solved.”
(Marvin Minsky, 1967)

Quelle: <https://quoteinvestigator.com/2021/03/04/ai-solved/>

“Within 10 years, computers won’t even keep us as pets.”
(Marvin Minsky, 1970)

Quelle: https://www.azquotes.com/author/10182-Marvin_Minsky



Bild: https://en.wikipedia.org/wiki/Ray_Kurzweil

“Artificial intelligence will reach human levels by around 2029. Follow that out further to, say, 2045, we will have multiplied the intelligence, the human biological machine intelligence of our civilization a billion-fold.”
(Ray Kurzweil, 2005)

Quelle: https://www.brainyquote.com/quotes/ray_kurzweil_591137

- Transhumanisten / Posthumanisten erwarten hyper-intelligente Maschinen, cyborgs, Unsterblichkeit etc. (siehe <https://en.wikipedia.org/wiki/Transhumanism>)

Realität: AI Anwendungen sind allgegenwärtig

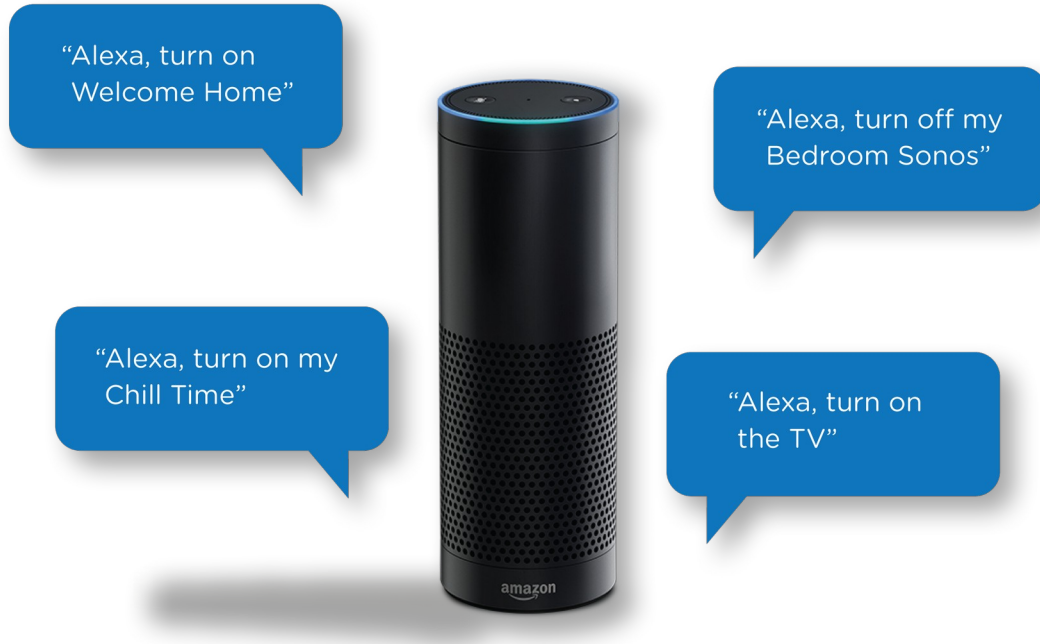


Bild: https://www.extremetech.com/wp-content/uploads/2017/09/Amazon-Echo-Blog_quotes_2-01.png



Bild: <https://i.ytimg.com/vi/GIMJltbWb7I/maxresdefault.jpg>



Bild: <https://en.wikipedia.org/wiki/Waymo>

“Cyborg”: Technologische Erweiterungen des menschlichen Körpers

Beispiele:

- Neil Harbisson: Im Schädel implantierte Antenne erlaubt es, Farben jenseits der menschlichen Wahrnehmung wahrzunehmen.
- Amanda Kitts trägt eine Armprothese
- Weniger futuristische Beispiele:
Hörgeräte, Herzschrittmacher, Brillen etc.



Bild: https://en.wikipedia.org/wiki/Neil_Harbisson



Bild: <http://4.bp.blogspot.com/-hJNV5BAgh0/TqpzX-7lxQI/AAAAAAAAALoc/vK0gRZIXihY/s1600/pr%C3%B3tesis+brazo+mano+bi%C3%B3nica+amanda+kitts.jpg>

Maschinen ersetzen menschliche Arbeit: Auswirkungen auf die Gesellschaft

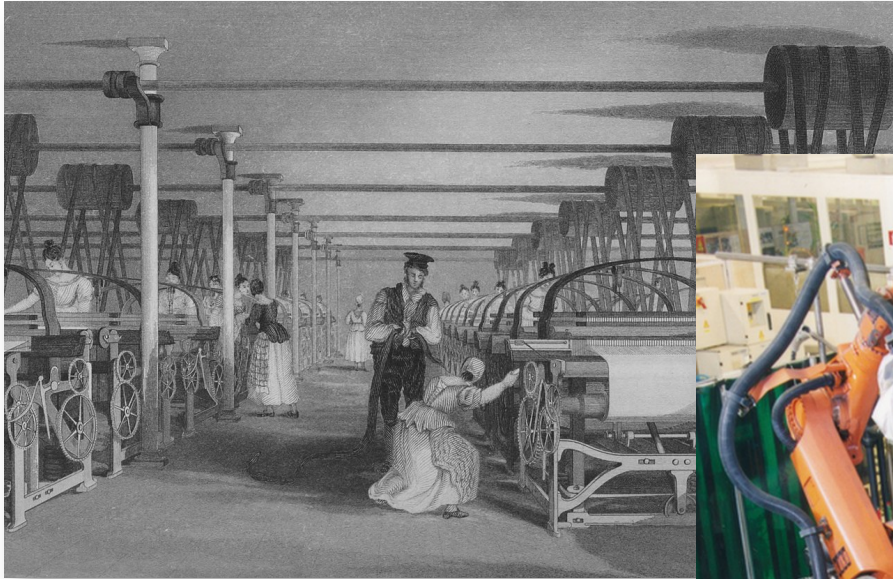


Bild: https://en.wikipedia.org/wiki/Industrial_Revolution



Bild: <http://prodok40.de>

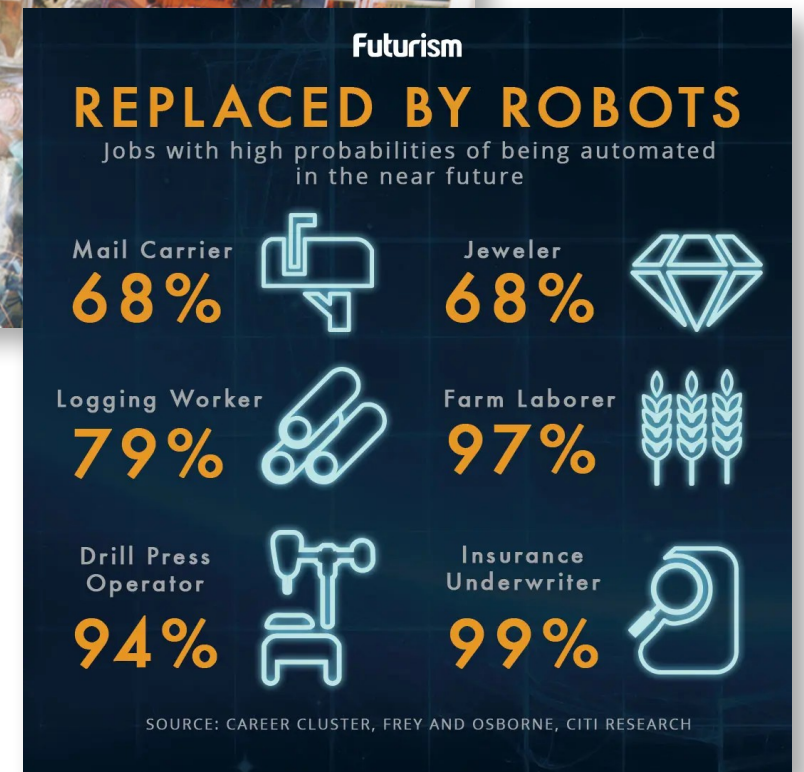


Bild: <https://futurism.com/will-artificial-intelligence-take-job-experts-weigh>

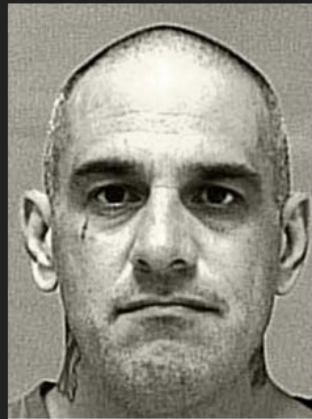
Biased ML: Vorurteile aus der Vergangenheit in die Zukunft projizieren

Machine Bias

There's software used across the country to predict future criminals. And it's biased against blacks.

by Julia Angwin, Jeff Larson, Surya Mattu and Lauren Kirchner, ProPublica
May 23, 2016

Two Petty Theft Arrests



VERNON PRATER

RISK: 3



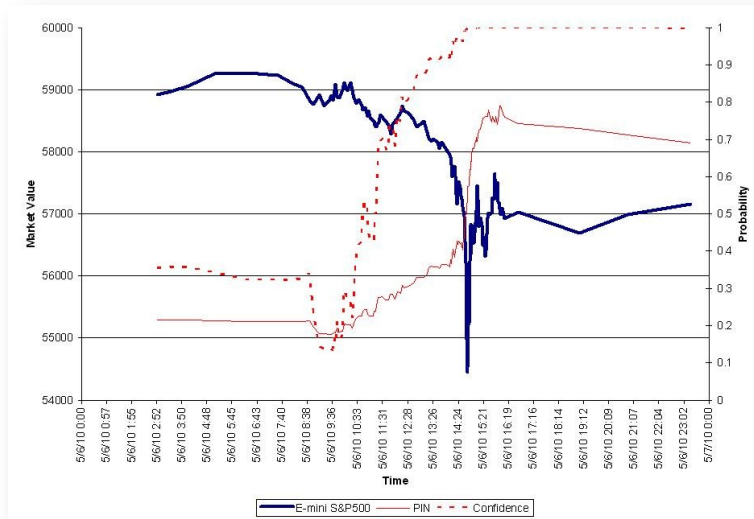
BRISHA BORDEN

RISK: 8

Borden was rated high risk for future crime after she and a friend took a kid's bike and scooter that were sitting outside. She did not reoffend.

Quelle: <https://www.propublica.org/article/machine-bias-risk-assessments-in-criminal-sentencing>

Ethische Fragen: Wer soll entscheiden, Mensch oder Maschine?



Hochfrequenzhandel (HFT, high frequency trading)

Bild: https://en.wikibooks.org/wiki/Lentis/Program_and_High_Frequency_Trading#/media/File:Flash_Crash.jpg

Autonome Waffen

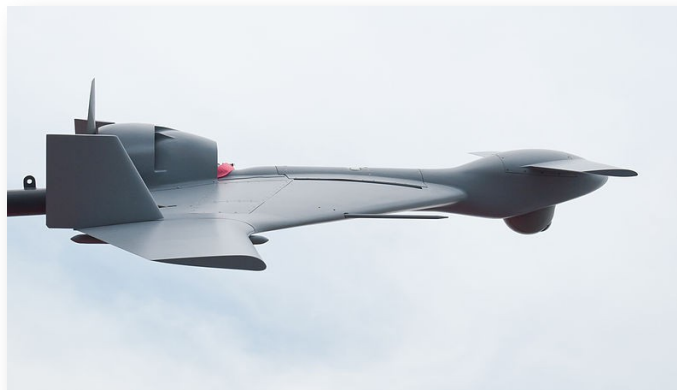


Bild: https://commons.wikimedia.org/wiki/File:IAI_Harop_PAS_2013_02.jpg

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Home » Autonomous Weapons Open Letter: AI & Robotics Researchers

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Autonomous Weapons Open Letter: AI & Robotics Researchers

Autonomous weapons select and engage targets without human intervention. Artificial Intelligence (AI) technology has reached a point where the deployment of such systems is — practically if not legally — feasible within years, not decades, and the stakes are high: autonomous weapons have been described as the third revolution in warfare, after gunpowder and nuclear arms.

Bild: <https://futureoflife.org/open-letter/open-letter-autonomous-weapons-ai-robotics/>

Weitere ethische Aspekte der KI ?



Bildquelle: https://cdn.pixabay.com/photo/2015/11/03/08/56/question-mark-1019820_960_720.jpg