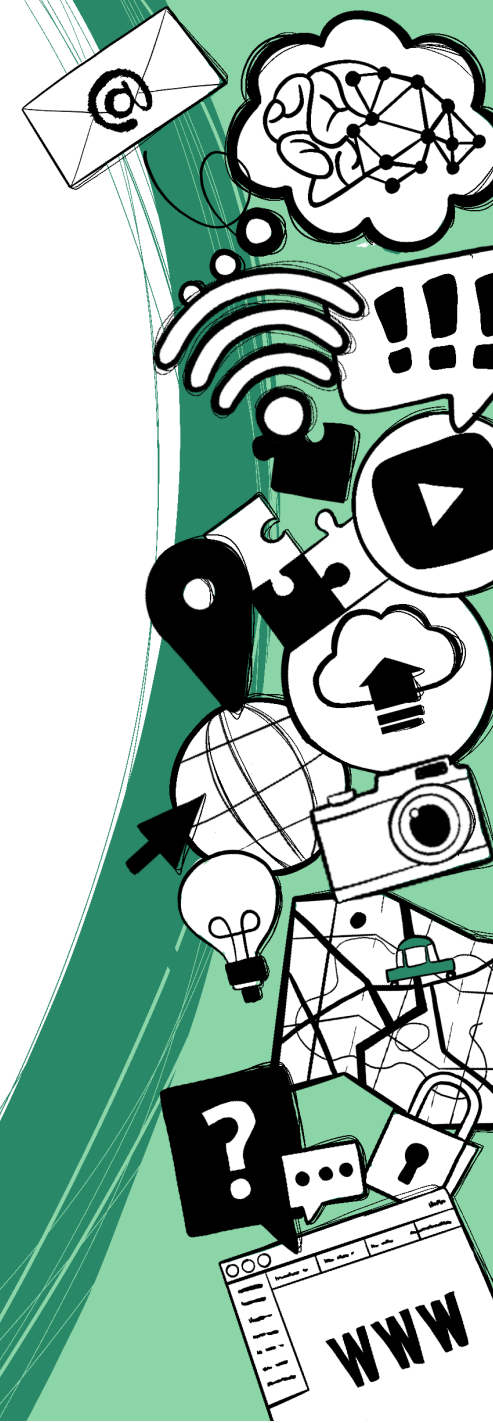


AI and Environment

Climate Savior AI?



Climate Savior AI?

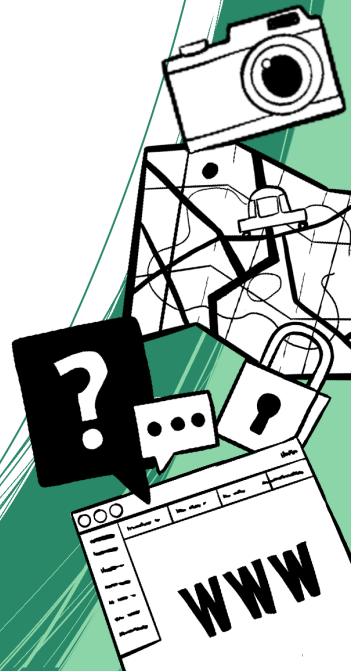
- **Allegation:**

Energy and resource consumption in computer science is getting higher and higher

- **E.g. Crypto Mining (generating virtual money)**

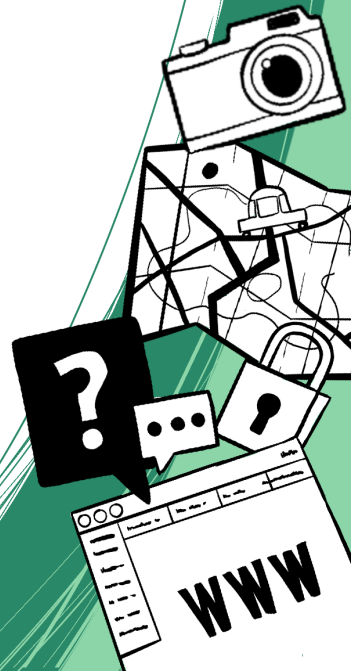
50 to 80 terawatt hours (TWh) per year are required

That's how much energy all six still active nuclear power plants in Germany generate per year!



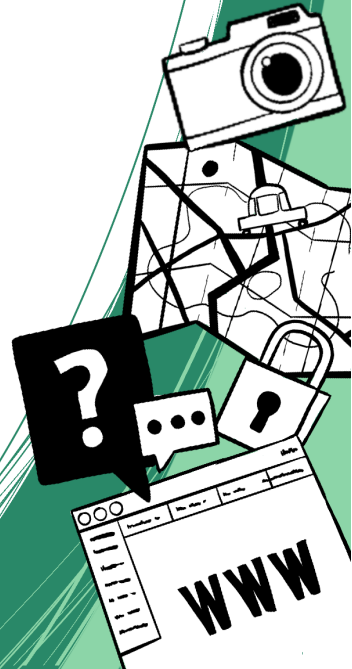
Climate Savior AI?

But through the use of **AI applications** can also positive effects for the **environmental and climate protection.**



Climate Savior AI? Examples

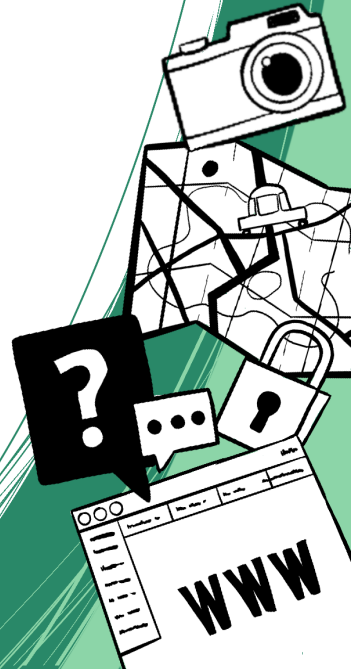
- **Thermostat in the Smart Home**
- Learns from the routines of the residents and adapts heating periods to the presences and absences
- Intelligent linking of weather data, forecast models and the actual heating data



Climate Savior AI? Examples

Lane Keeping Assist when driving

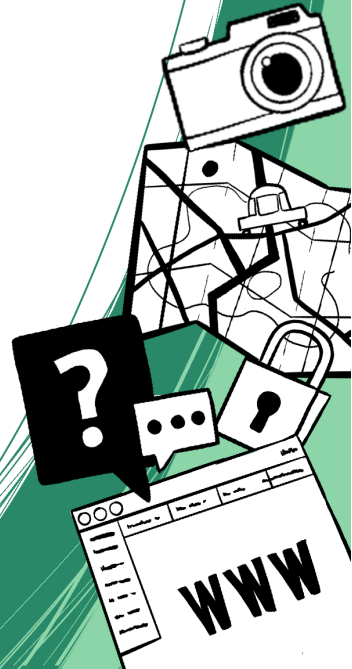
Already energetically
profitable if no accident
is built by the assistant



Climate Savior AI? Examples

smart traffic control

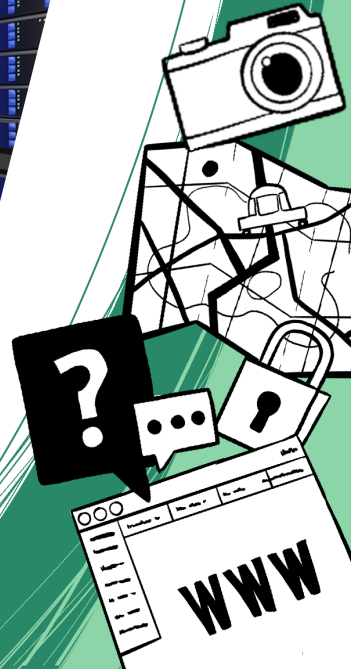
- Measure traffic flow using **mobile phone data** to **avoid traffic jams** and send them to affected drivers
- **Control traffic light controls** and **speed controls** by AI systems to save energy



Climate Savior AI? Examples

The intelligent control system **Deepmind** from Google

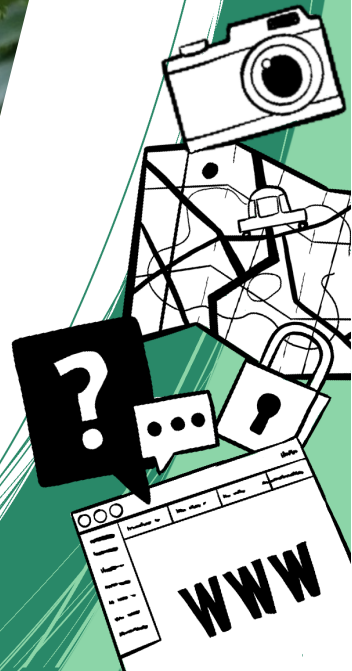
- Reduces energy consumption by 40%
- Analysis of cooling systems to measure air pressure or temperature



Climate Savior AI? Examples

Smart Farming

- Fertilizers and pesticides can be used precisely with the help of AI
- Efficient field work and harvesting
- fewer pesticides, more accurate use of agricultural equipment



Practical input Idea lab "Green AI"

Development of an intelligent application to save energy

