

The Father of Robotics: Al-Jazari and His Works

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The Muslim inventor who may have inspired Leonardo da Vinci

The 12th century scholar who laid the groundwork for modern engineering, hydraulics and robotics.



Al-Jazari's Life and Contributions

1 Early Life

- Ismail al-Jazari: Muslim scientist, inventor, mathematician, and mechanical engineer.
- Born in 1136, possibly in Diyarbakır, Turkey, or Mesopotamia (present-day Iraq), during the Islamic Golden Age.
- Known as "The Father of Automation" for his pioneering work in automata.

2 Engineering Career

- Al-Jazari served as a court engineer for the Artuqid dynasty, where he designed and built a variety of innovative mechanical devices.
- Al-Jazari designed both elaborate luxurious machines and practical machines.

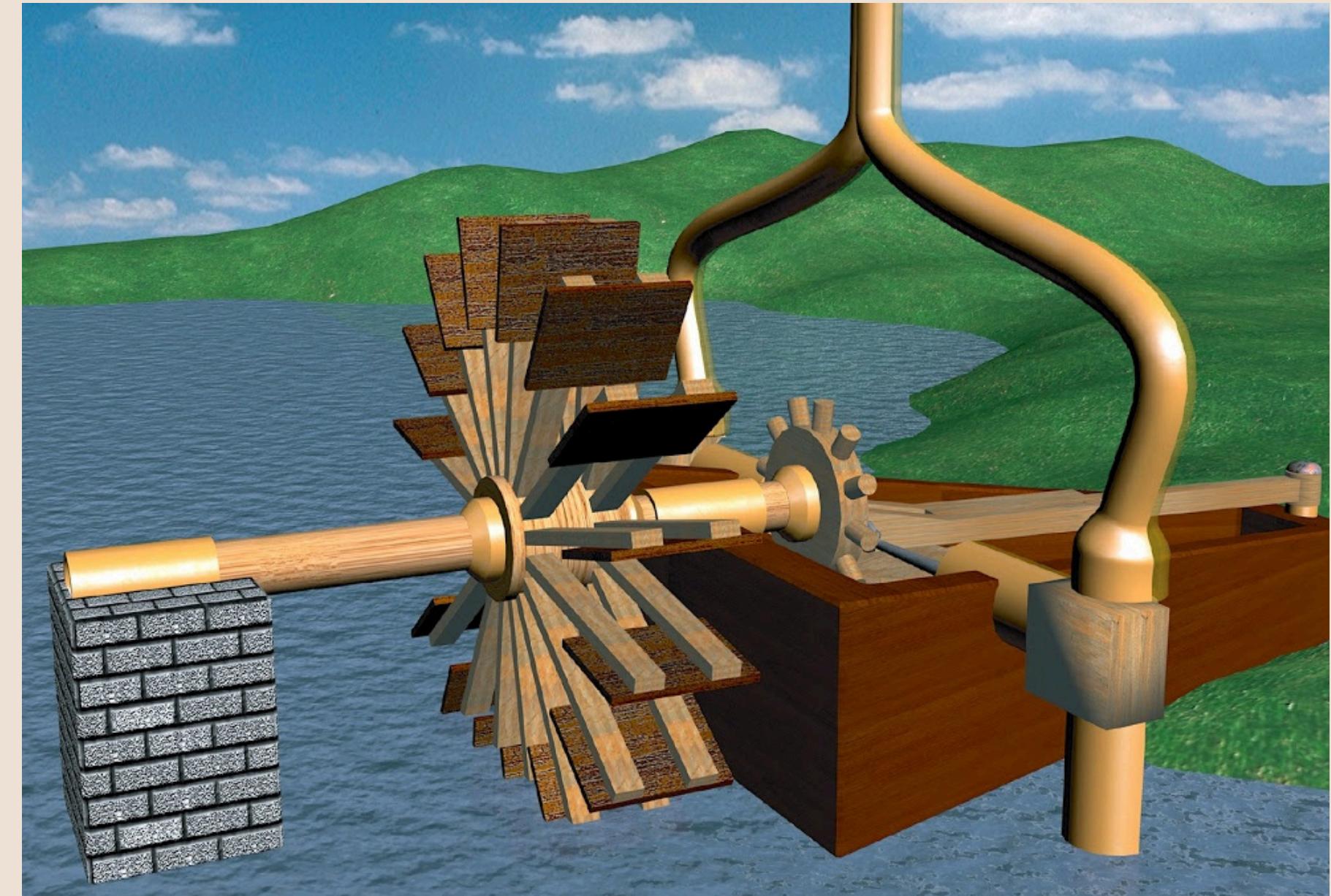
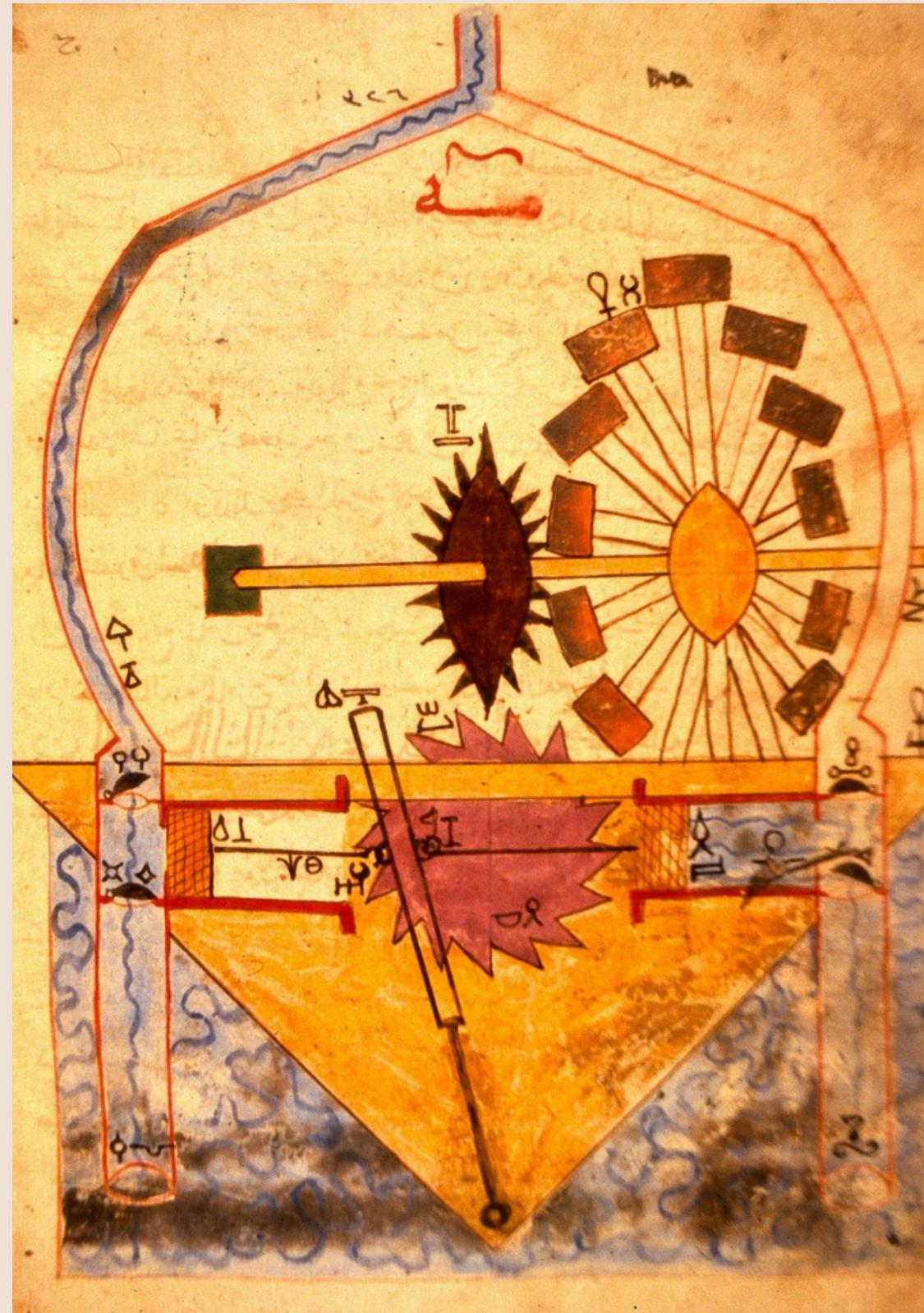
Achievements

- Robotics traces back to the medieval era, with Ismail Al Jazari as a pioneer nearly a millennium ago.
- Al Jazari's fame stemmed from his diverse inventions, totaling over 50 devices, ranging from water clocks, candle clocks, fountains, musical devices, hand washing devices, to machines for raising water from ponds, rivers, and flowing canals.
- His work, ***The Book of Knowledge of Ingenious Mechanical Devices*** (1206), remains a cornerstone in medieval Islamic mechanical engineering, offering detailed insights into his creations through diagrams and illustrations.





Automatic Water Pump



Water Pump Animation

Elephant Clock



A model of the clock in Dubai
Ibn Battuta Shopping Mall.

[Elephant Clock Animation](#)

[Elephant Clock in the 1001 Inventions Film](#)

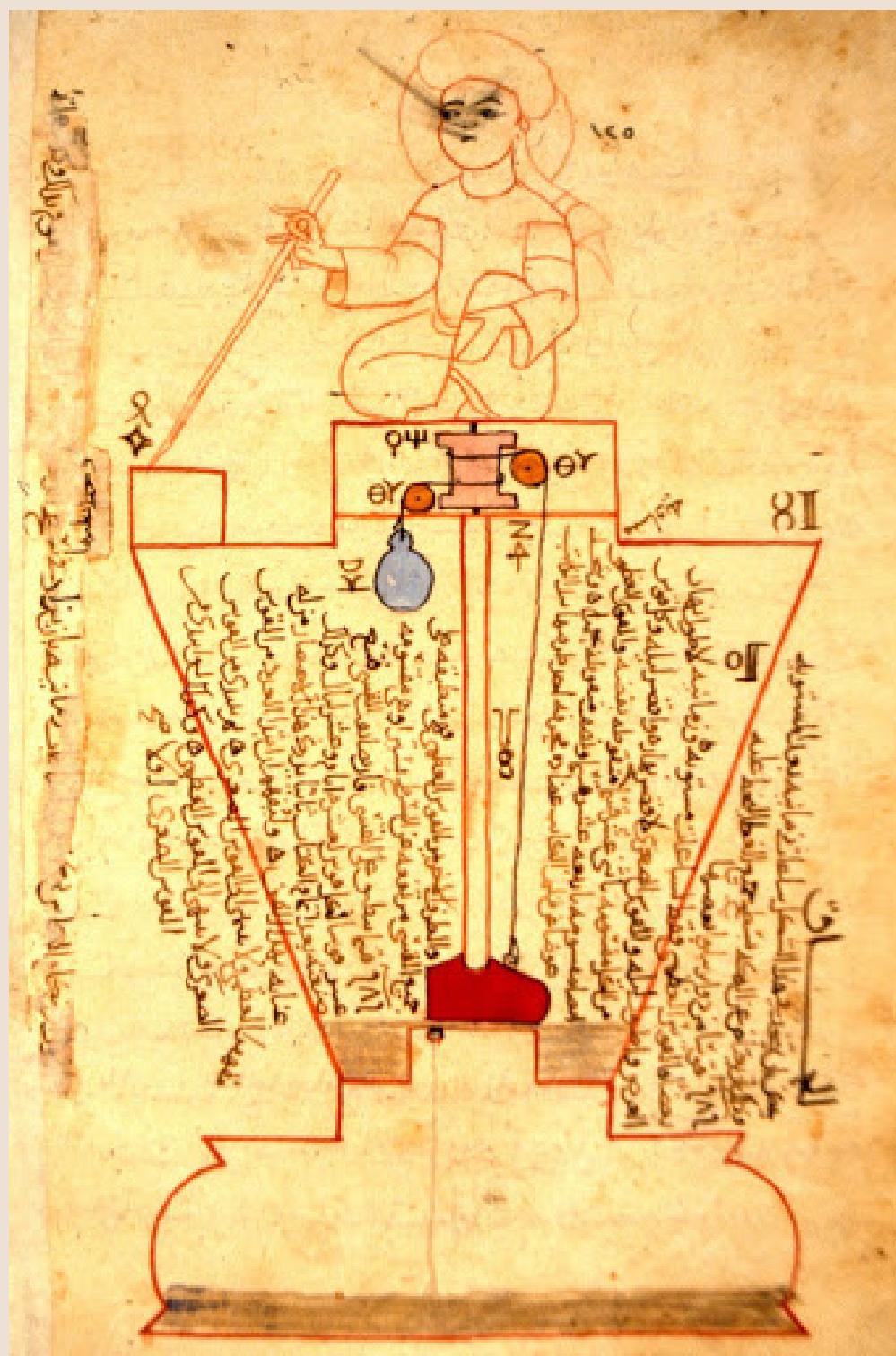
Castle Clock



The castle water clock is one of the grandest clocks mentioned in al-Jazari's book.

Castle Clock Animation

Scribe Clock



A scale model of Al-Jazari's 13th-century Scribe Clock.

[Scribe Clock Animation](#)

Thank you
for listening!

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