



# TESTING AI AND ETHICAL ISSUES

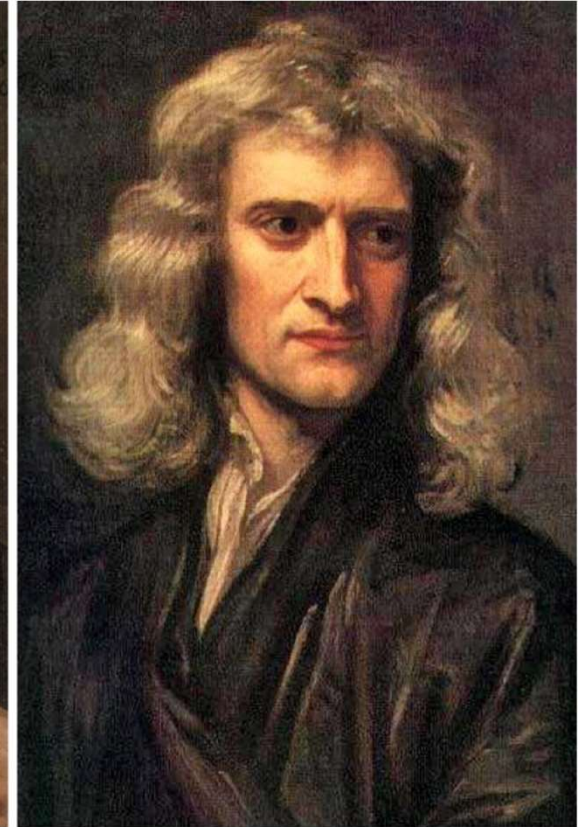
Jukka K Nurminen  
Professor of Computer Science



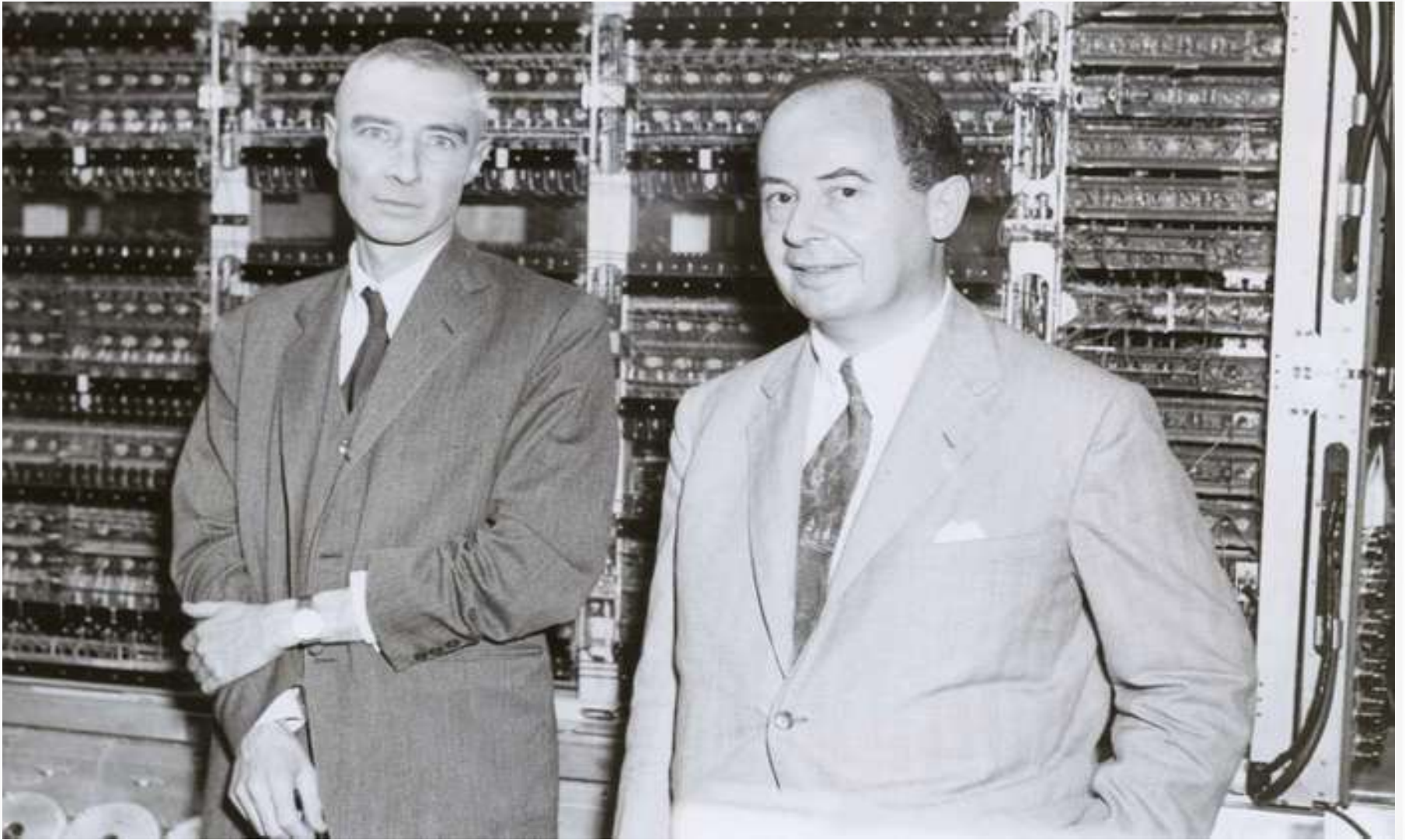
Tycho Brahe  
(1546–1601)



Johannes Kepler  
(1571–1630)

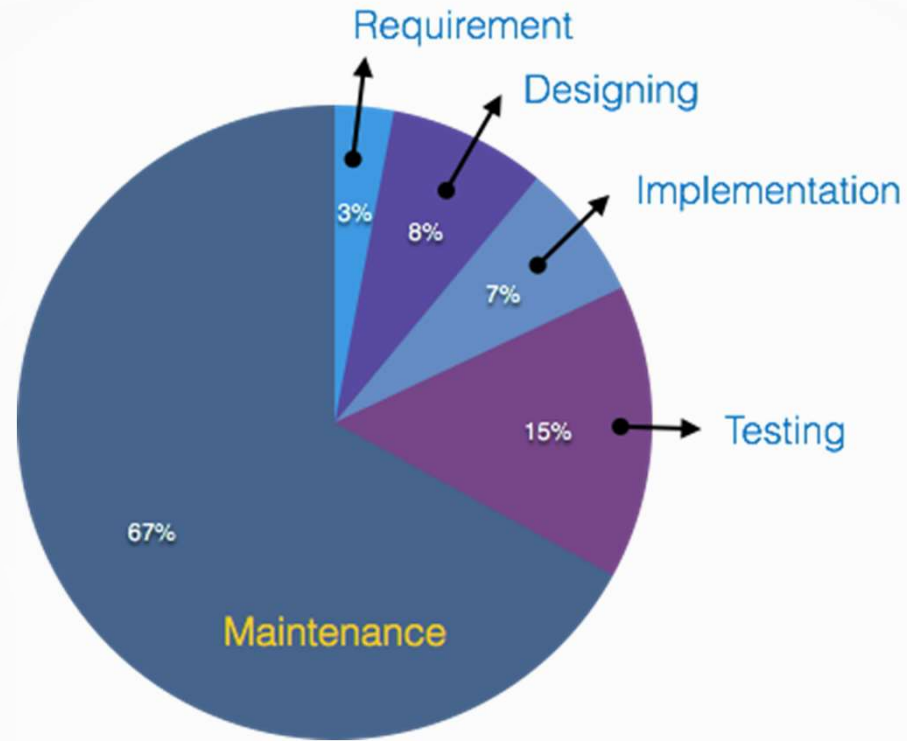


Isaac Newton  
(1643–1727)





**DO THE RIGHT THING**  
**DO THE THING RIGHT**



## Software Life-Cycle Costs - Schach 2002



# MACHINE LEARNING IS NOT PERFECT





# ETHICALLY DIFFICULT DECISIONS



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# MISSING: METHODOLOGY FOR BUILDING ETHICAL AI

- We have now
  - Checklist type of Ethical AI principles
  - Ways to detect different kinds of controversies AI creates
- Missing
  - "methodology" to deal with the ethical challenges of building AI
    - Is it ok to build this system
    - Is it ok that the system works like this
    - Is it ok to use this data
    - How do we "prove" that the system works ok