FIRST PLASTIC PROCESSOR!

Silicon (normally what processors are made of) is rigid and expensive, and researchers in Europe have just used 4k plastic transistors to create a flexible microprocessor 2cm² big.

technologyreview.com/computing/37126

Today

- Functions as Data
- Higher-Order Functions
- Useful HOFs (you can build your own!)
  - map Reporter over List
    - Report a new list, every element E of List becoming Reporter(E)
  - keep items such that Predicate from List
    - Report a new list, keeping only elements E of List if Predicate(E)
  - combine with Reporter over List
    - Combine all the elements of List with Reporter(E)
    - This is also known as “reduce”
- Acronym example
  - keep \( \map \) combine

Summary

- Functions as data is one of the two (programming) big ideas in this course
- It’s a beautiful example of the abstraction of the list iteration details
- Google (and other companies) use this!
  - They use “map-reduce”