

# Revenge of the Nerds

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Software Engineering Course Presentation

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- 4 Dream Language

“Programming languages have almost caught up with 1958.”

Paul Graham

# A Bit of History



Question about *computation*.

If we had machines that have infinite computational power, what problems would we be able to solve?

## Lambda Calculus.

- A formal system developed by Alonzo Church.
- Essentially a programming language for one of those imaginary machines.
- Equivalent in power with Turing Machine.

## Lisp.

- Invented by John McCarthy as an implementation of Alonzo's lambda calculus, in 1958.
- Lisp machine developed by programmers from MIT AI lab, as a native hardware implementation.





