



Programming in Common Lisp

4 May 2019



I like Julia.

But I don't like
programming in it...

(...yet?)

- What would be the “type” of the programming “function”?
 - **programming** : (Code, Idea) \rightarrow (Code, Idea)
- Software is thus an iterative process:
 - **engineer** idea = (fix programming) (noCode, idea)
 - **software** idea = fst (engineer idea)

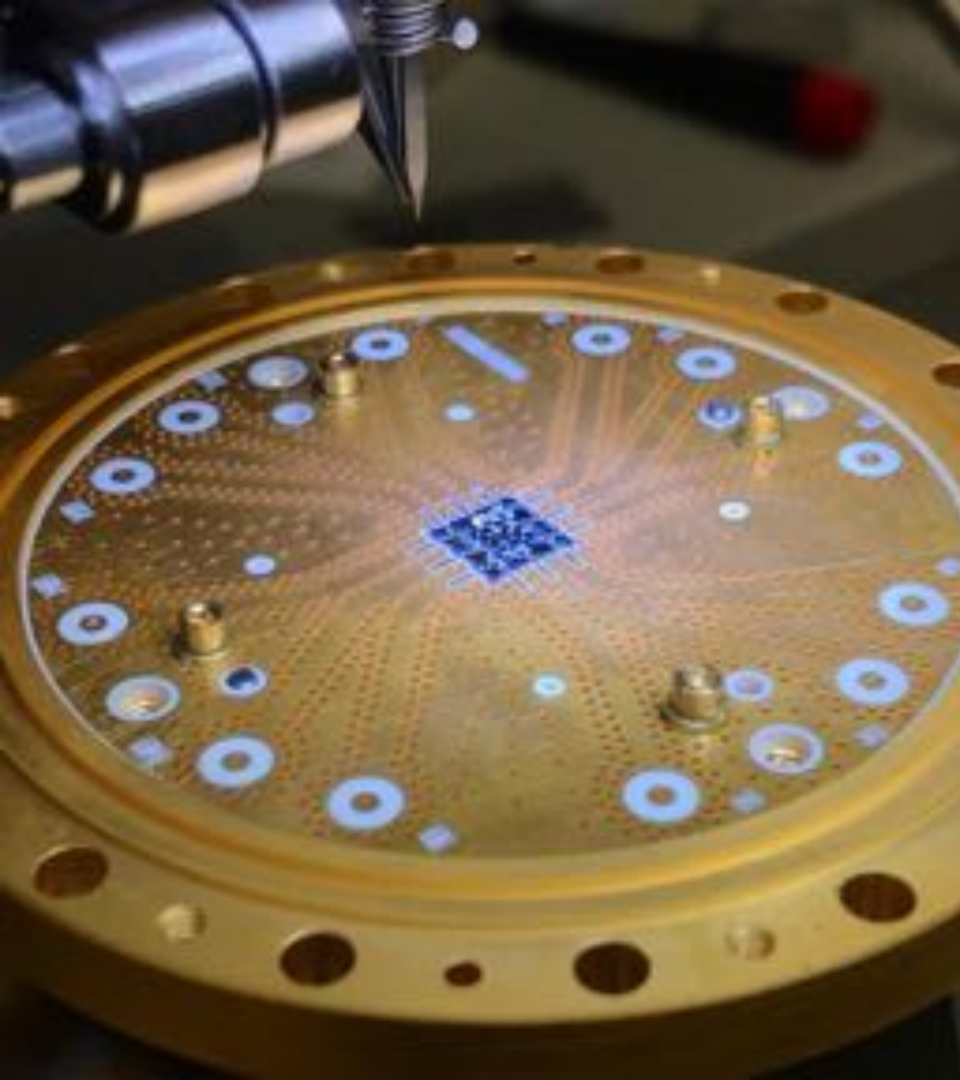


(fix programming)

What we ought to optimize.

rigetti

- Fixed point computations don't converge immediately.
 - Sometimes they never converge.
 - But they often get “close enough”.
- The fixed point is a metaphor for software iteration.
 - I claim it is *intrinsic* to software and its definition!
- Languages, tools, and workflows can optimize iteration.

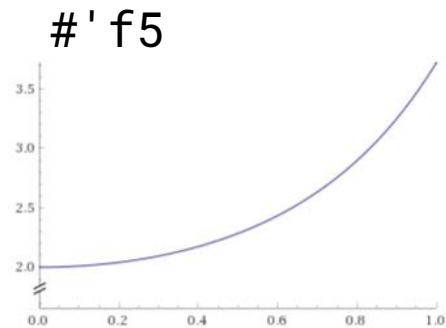
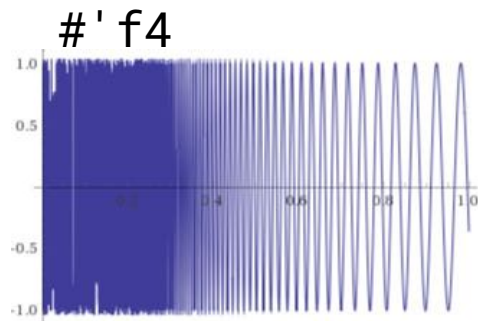
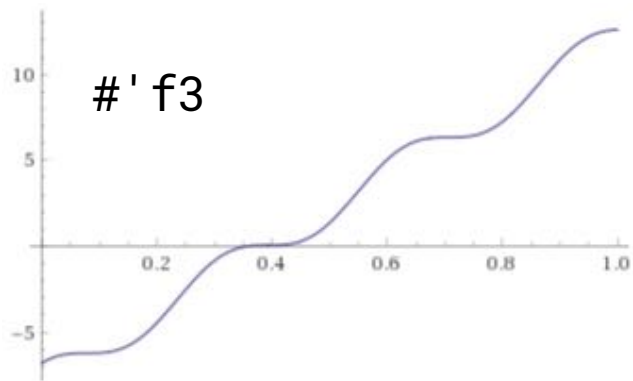
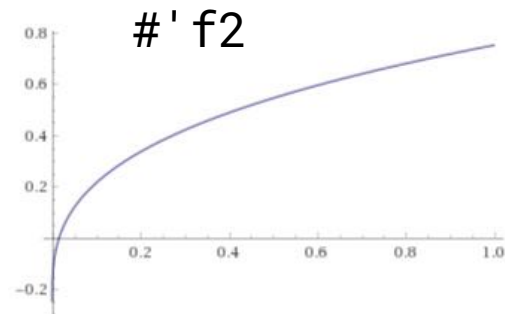
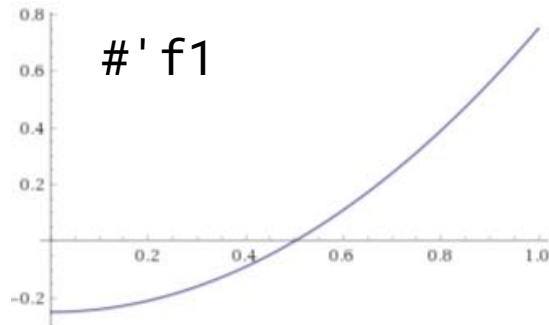


Language Common Lisp

Tools Emacs and SLIME (Superior
Lisp Interaction Mode for Emacs)

Workflow Interactive development
with fast feedback

How do we write a root finding library?





Thank You!