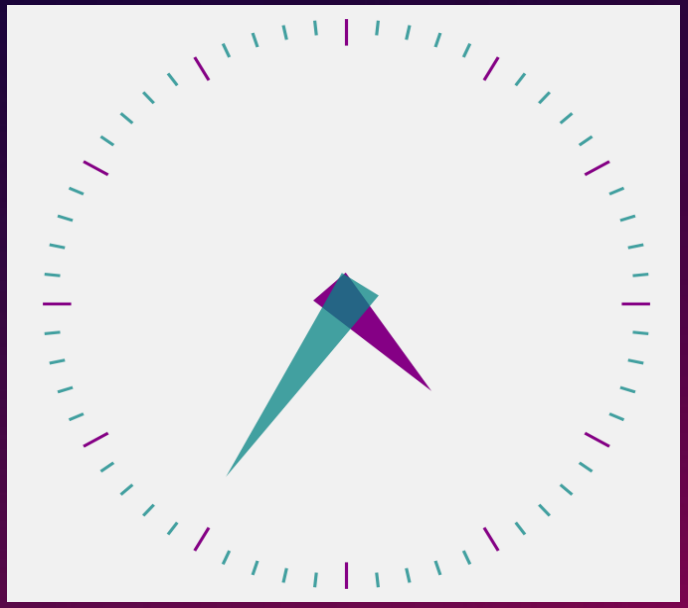
Best Clock, Beef Clock (Minotaur Standard Time)



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The task

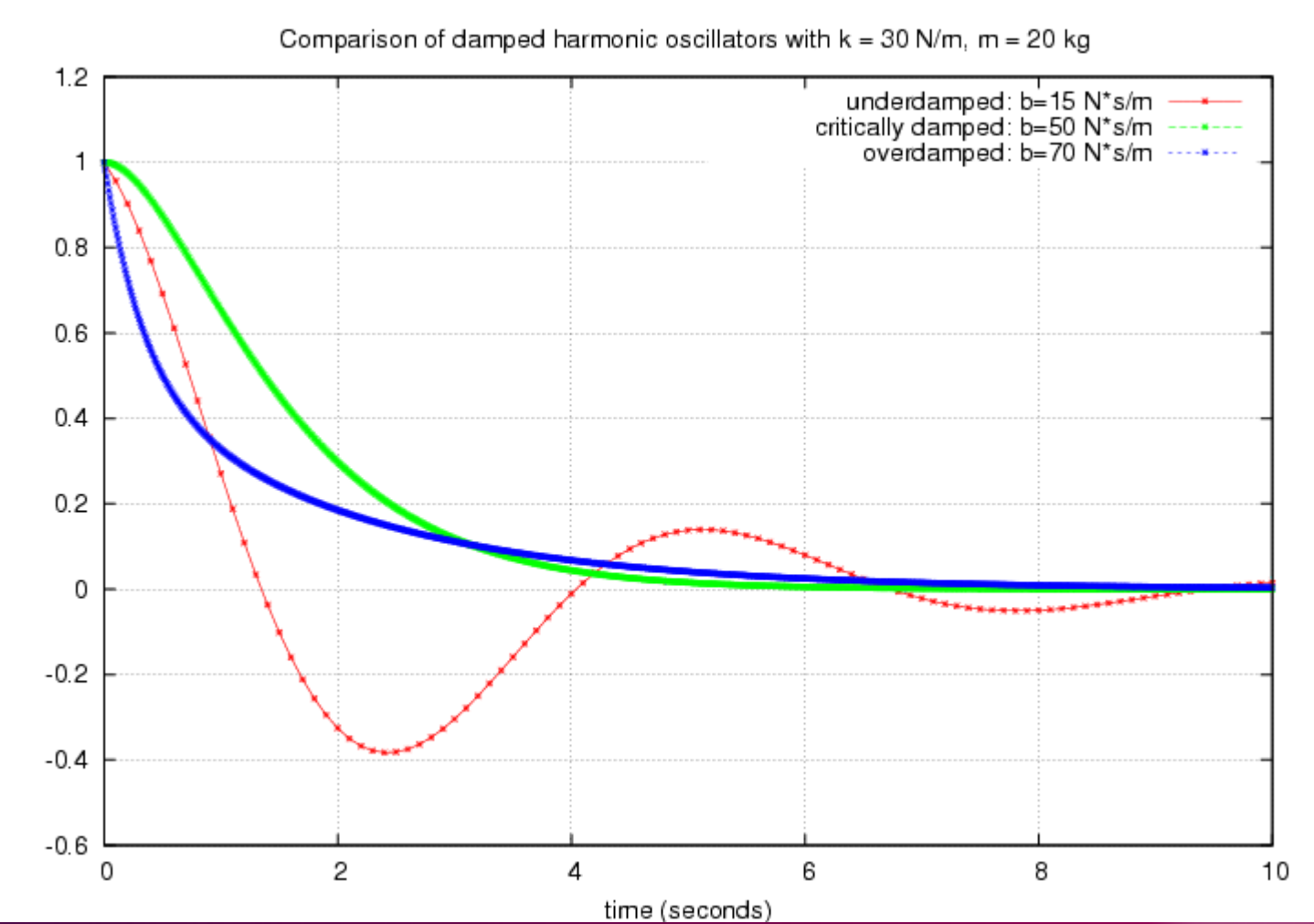
Create a clock that is:

- Never correct
- Never incorrect in a predictable way
- …but is plausibly correct at a glance

First Try

- Randomize start time (within small-ish distance of true time)
- Randomize speed and direction of clock
- Add “repulsion” if clock was too close
- Add “attraction” if clock was too far away

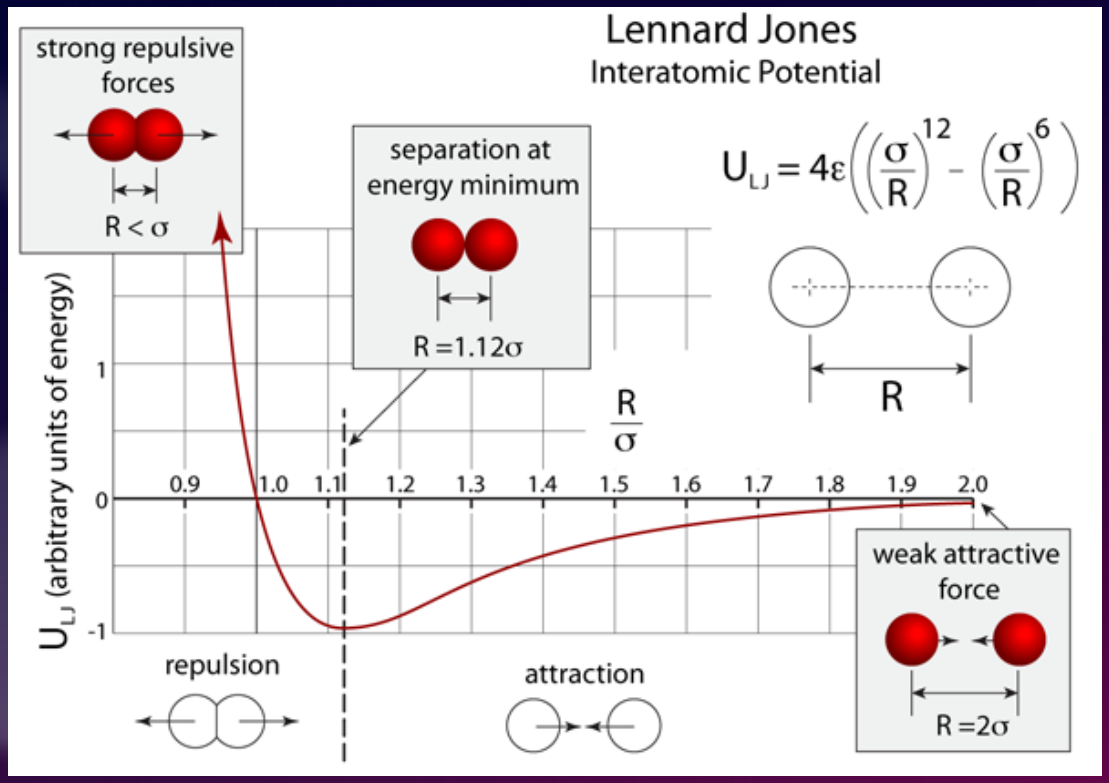
Difficulty: Overdamped Behavior!



Repeatedly converged to predictable offset from real time, based on discrete hard-coded parameters and setpoints

Taken (via Google Images) from:
http://spiff.rit.edu/classes/phys312/workshops/w5b/damped_theory.html

Improvement:
Force from Modified Lennard-Jones Potential



Taken (via Google Images) from:
http://atomsinmotion.com/book/chapter5/md

-(dU/dr) = force, which is used to change the speed and direction of the clock over time.

Random scale factors and conversions of floats to ints “fuzz” this and make it harder to determine true time from observations.

Demo Time!

Be the first of your friends to get it, use it, and love it!
https://github.com/shipman/best_clock