

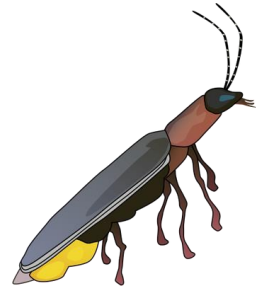
Concluding Remarks

Alexander G. Ororbia II
Biologically-Inspired Intelligent Systems
CSCI-633
4/25/2024

What Have We Seen this Semester?



- For the past couple of months, we talked about:
 - Climbing hills
 - Cooling metals
 - Messing with DNA
 - Clouds of particles
 - Lightning bugs
 - Bats
 - Flowers
 - Music
 - Balancing multiple goals at once...
- Things got a bit weird in this class....
 - ...but hopefully it was a pretty fun journey!



***Covering Jethro Tull's Locomotive
Breath's flute solo is a great
exercise for your rock band!***



What is the Next Algorithm?

- **Swarm Intelligence**

- Dolphin echolocation
- Egyptian vulture
- The fish swarm/school algorithm
- The great salmon run algorithm
- The group search optimizer
- The cultural algorithm
- The shuffled frog-leaping algorithm
- Social spider algorithm/search

- **Non-Swarm Intelligence**

- Big bang, big crunch
- Bacterial foraging algorithm
- The black-hole algorithm
- Charged system search
- Gravitational search
- The galaxy-based search algorithm
- The intelligent water drop algorithm
- Invasive weed optimization
- The water-cycle algorithm
- Spiral optimization

But what about the whales???



What *Really* is the Next Algorithm?

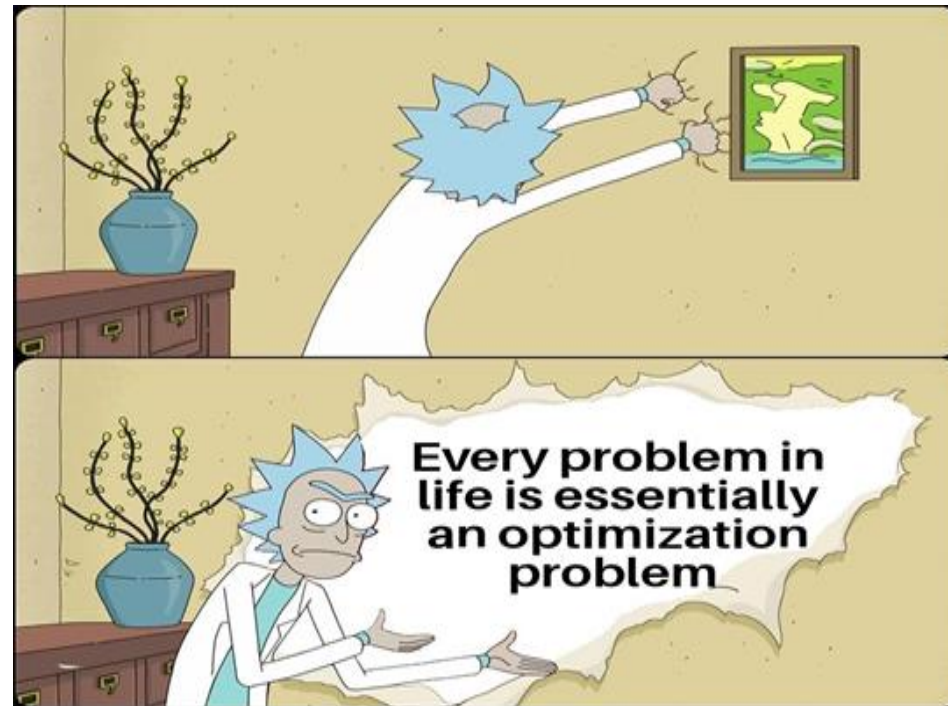
- <Insert your idea here>

The Final Exam

- May 7, 1:30-4pm; Room 070-1445
 - Each team will get approximately 12+1 min to present
 - So make it *clear, engaging, and to-the-point*
 - Your team's slides are due no later than 1:29pm May 7 (MyCourses dropbox is up; one member can submit on behalf of team) – no exceptions
 - **Label your slide deck files as follows:**
<lastname_userid>-<lastname_userid>-<lastname_userid>_finaltalk.pptx (or .pdf)
 - If a team member does ***not*** show up physically, ***they will receive a non-negotiable zero*** for their score
- Make sure your talk includes at least one slide for the following items:
 - 1) background/clear problem description,
 - 2) prior/related work/methods,
 - 3) approach/project design/steps,
 - 4) experimental design,
 - 5) experimental results/comparisons,
 - 6) insights/observations/lessons learned,
 - 7) limitations/future work/next steps.
- Make sure your slides are of high-quality, with high-quality/resolution images and a nice, thoughtful style (we are looking/grading for ***high-quality, thoughtful*** talks and slides)

The Final Exam

- We look forward to your talks! Have fun and enjoy presenting your semester of hard work and scientific discovery!
- And remember...



Questions?

